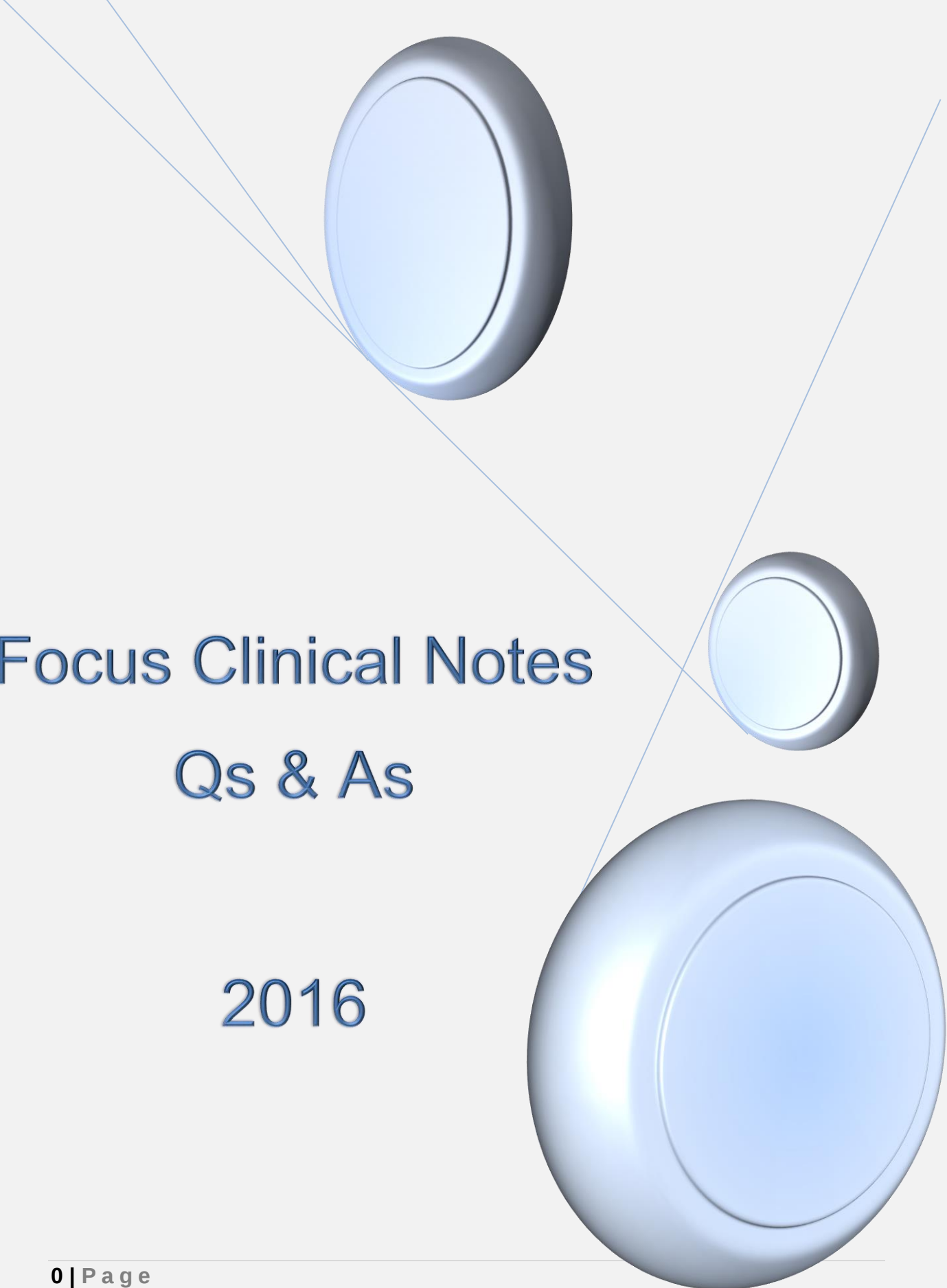




Focus Clinical Notes

Qs & As

2016

VISIT...

LANZAROTE
Caliente.COM

بسم الله الرحمن الرحيم

تم اعداد هذه المذكرة اعتمادا على مذكرة كلينكال سين وجيم ل د . أشرف زكي مع إضافة تفسيرات الأجوبة من مختلف المصادر منها كورس عملي د أشرف زكي 2016 ... كتب الكلينكال الخاصة بالدكتور وبعض الكتب الكلينكال الأخرى

حتى تكون مصدرا كافياً لمذاكرة الكلينكال لإمتحان الإند راوند أو الفاينال

😊 مع أرق التمنيات بالنجاح والتوفيق 😊

Focus Team 2016

GENERAL

1. What is meant by "body mass index"?

*Body Mass Index: $\{BMI = \text{Weight} / (\text{Height})^2\}$

الوزن بالكيلو جرام على مربع الطول بالمتر

Normal, High or Low

18 - Normal.
 <18..... Under Weight.
 25 - 29..... Over weight.
 30 - 39..... Obesity.
 40 or more..... Morbid Obesity.

N.B / Obesity: تقدر تعرفها عن طريق

- Sunken Umbilicus
- Thick skin folds.
- History Of over nutrition
- Family History

2. What are causes of "Orthopnic Position"?

• LEFT SIDED H.F.

لان السعه الكمييه بتاع ال lung تستوعب كمييه اكبر من اللى جواها
 فلما العيان ينام على ظهره الدم اللى راجع يزيد فالرئه تستوعب الزياده
 فهنا فى الحاله دى اصلا القلب الناحيه الشمال بايظه وعامله Pulmonary congestion
 فالرئتين مش هيستحملو الدم اللى جاى زياده من ال Venus return in flat position

SEVERE EMPHYSEMA:

Emphysema cause loss of elastic recoil
 فالعيان يحب ينام Free
 فمحصلش لاي ناحيه Restriction
 And by cause of rupture of intra-alveolar septum so no diffusion and
 perfusion (emphysematous bullae)

TENSE ASCITES:

بتزق الحجاب الحاجز فيزق الرئتين

MEDIASTINAL MASS

العيان لما ينام على ظهره mass دى تضغط على ال Bronchi .. تخنقه.

3. What are other DECUBITI you know?**(1) LATERAL**• **LUNG ABSCESS**

Lung Abscess لو نام فى الناحيه السليمه يكح صديد.

Because the floor of abscess is necrotic so non sensitive no cough receptor sensation

فلما ينام على الناحيه العيانه الصديد هيروح بالجاذبيه للسليمه اللى فيها شغال ال

Cough receptor...Cause cough

• **PLEURISY****(2) SQUATTING: FALLOUTS' TETRALOGY**

In Fallout's tetralogy

بيبقى عنده

Rt ventricular hypertrophy + VSD

مشكلته ان الدم الازرق اللى فى RV

بيطلع على الاورطي ومنها على جميع انحاء الجسم فالعيان بيبقى ازرق وكمان الدم اللى رايح للرنه قليل عشان

Pulmonary stenosis

فال vasodilation هيخلي العيان مصيبتة سوده. لانه بيقلل ال

Peripheral resistance so aortic pressure decrease so shunt from RT to LT increase so

cyanosis increase and hypoxia of brain cause syncope.

ففى هذا الوضع هيضغط على ال

Femoral and splanchic vessels to increase resistance and aortic pressure increase so

shunt decrease and oxygenation increase.

(3) LEANING FORWARDS (KNEELING):

- PERICARDIAL EFFUSION.

ضاغط ع اللي حواليه MEDIASTINUM.. فضاغط ع الرئه ..مش قادر ياخذ نفسه

- PERICARDITIS.

العيان لما يميل لورا تعمل STRETCH OF INFLAMED PRECORDIUM .. فيتوجع .. اما لما يطلع
لقدام القلب يسند على ال STERNUM .. فالالم يخف.

(4) PRAYING MUSLIM POSITION

- Mediastinal Mass:

العيان لما ينام على ظهره mass دى تضغط على ال bronchi تخنقه

- Pericarditis, Pericardial effusion

العيان لما يميل لورا تعمل

Stretch of inflamed pericardium

اما لما يطلع لقدام القلب يسند على Sternum

(5) LATERAL POSITION

لو نام على الجنب التانى ينهج ويبحب ينام على الجنب السليم بيحصل فى حالات Trepopnea:

Unilateral extensive lung disease:

عشان الدم ينزل فى الناحيه السليمه لان الدم هيروح بالجاذبيه للحته ال فيها الهوا فمينهجش اما لونا
على الجنب البايط الدم كله هيروح لها فيتخنق لان مش هيبقى فى الناحيه السليمه, perfusion

Lung Abscess: لو نام فى الناحيه السليمه يكح صديد

Because the floor of abscess is necrotic so non sensitive no cough receptor
sensation

فلما ينام على الناحيه العيانه الصديد هيروح بالجاذبيه للسليمه اللي فيها شغاله

Cough receptor cause cough

Pleurisy: بينام على الجنب اللي بيوجعه عشان ميزودش ال Stretch in respiration

Hemiplegia: بينام على الجنب العيان عشان ميتكتفش

Sciatica: بينام على الجنب العيان عشان يمنع ال stretch فيمنع ال الوجع

(6) SLEEPING AGAINST THE WALL:

Photophobia : بينام و وجهه للحائط

4. What is "Glasgow coma scale"?

-A scale to assess conscious level. It depends on 3 parameters:

1. Eye opening (5 degrees).
2. Verbal response (5 degrees).
3. Motor response (5 degrees).

*Scale of 3 is deep coma.

*Scale of 15 is fully conscious.

* Variable levels of consciousness lie in-between.

1. eye opening	2-verbal response	3-motor response
A-Spontaneous دخلت لقيت عنيه مفتحه اديله 4 درجات	A- Oriented (know place and time person) وبيجابو على الاسئله السهله ياخذ 5 درجات	A -Obeys commands تقله قعد يقعد ياخذ 5 درجات
B -To speech عينيه مغمضه قلنتله فتحها راح مفتحتها اديله 3 درجات	B- Confused بيجابو على الاسئله السهله بصعوبه زى اسمك ايه مثلا	B-Localized pain بيمسك المكان اللي انت غزيتيه فيه ياخذ 4 درجات
C -To pain ياخذ درجتين	But not oriented (to place and time person) C - Words بيجابو بكلمات ملهاش علاقه بالسؤال زى اسمك ايه يقتلك التلاجه ياخذ 3 درجات	C-Flexion to pain ياخذ 3 درجات
D -Non ياخذ درجه	D-Sound بيرد باصوات لا ترقى الى كلمات ياخذ درجتين	D - Extension to pain ياخذ درجتين
	E - Non ياخذ درجه	E - Non ياخذ درجه

5. Causes of disturbed conscious level (or coma)

1. Hysterical.

2. Organic

- Intracranial causes.
- Extracranial causes.

6. How to "differentiate" intra from extra cranial causes of coma?

Intracranial causes are associated with signs of lateralization (unilateral or asymmetrical neurologic deficit).

Signs of lateralization

- Babinski sign
- hypotonia
- miosis
- hyporeflexia

7. What Are "Extra Cranial" Causes Of Coma?

Intracranial	Extra cranial
1. Intracranial hemorrhage.	1. Hepatic encephalopathy=liver failure.
2. Cerebral infection.	2. Uremic encephalopathy =Renal failure
3. Encephalitis.	3. CO2 narcosis=Respiratory failure.
4. Brain tumor.	4. Hypoglycemia.
5. Concussion.	5. Hyperglycemia.
6. Hypertensive encephalopathy.	6. Electrolyte imbalance.

8. What are "precipitating factors for hepatic encephalopathy?

1. High protein diet.
2. G.I.T. Bleeding.
3. Constipation.
4. Hypokalemia.
5. Rapid tapping of ascites.
6. Infection.

9. What is the most important "treatment" of hepatic encephalopathy?

1. Enema.
2. Lactulose & Neomycin.
3. Protein restriction.

10. What is normal HR?

60-100 beats/minutes.

11. What are causes OF "sinus tachycardia"?

1. Exercise.
2. Emotional stress.
3. Fever.
4. Thyrotoxicosis.
5. Heart failure.
6. Parasympatholytics
7. Sympathomimetics

12. What Are Causes Of "Sinus Bradycardia"?

1. during sleep.

Due to parasympathetic predominance

2. Obstructive jaundice.

3. Sympatholytic (e.g. B. blockers).

4. Athletes.

(All vital signs are low normal)

5. Parasympathomimetics.

Increase bile salts concentration in the blood lead to effect on prostaglandin metabolism lead to decrease HR

Bile salt cause inhibition of SA Node

13. What is meant by "pulse deficit"?

Apical HR (by auscultation) is more than radial HR due to irregular rhythm.

N.B / Any Irregular pulse /cardiac cycle become variable so diastolic time become variable so filling is variable so stroke volume become variable and pulse volume

عشان كده الضربات الضعيفة ساعات متوصلش لل Radial

Cause pulse deficit. (HR –pulse rate) in 1minute.

If pulse deficit > 10 case is A.F

if pulse deficit < 10 case is Extra systole

14. How to differentiate between irregular pulse of af & that of extrasystoles?

AF	Extra systole
(1) Pulse deficit > 10.	(1) Pulse deficit < 10.
(2) You cannot count 4 regular beats.	(2) You can.
(3) Increase by exercise.	(3) decrease by exercise

15. What are causes of "big pulse volume"?

N.B:

*المتحكم في ال Systolic Blood Pressure هو ال Stroke Volume تناسب طردى.
 *المتحكم في ال Diastolic Blood Pressure هي ال Peripheral Resistance.... تناسب طردى.
 Diastolic Blood Pressure اللى بيعبر عن الدم المتبقى في الشريان بعد هروب الدم لل Tissue
 Causes: diastolic ال زيادة ال systolic او نقص ال
 او زياده الاتنين بس ال Systolic او زياده ال. Systole ونقص ال Diastole اكثر.
 النبضه عباره عن النفخه ال بتيجي نتيجة الفرق مابين ال Systolic and diastolic diameter
 عشان كده بيسموه pulse pressure
 زياده الاتنين بس ال Systolic اكثر في ال Systemic hypertension

1. AR

لان الدم المتبقى بيرجع للقلب تانى وكمان الحبه اللى رجعوا القلب هيزودوا ال Stroke volume

فلما يزيد يحصل VD عشان يستوعب الزيادة

2. Anemia.

Due to increase stroke volume and blood scape rapidly and vasodilation

(بدل مالدم كان غسل بقى مياه)

3. Aortic atherosclerosis.

أما بتسحب الدم منه مبيهو يش فى ال DP

أما اثناء ضخ الدم بيضخ بصعوبه فال SP يزيد

- A-V fistula.
- Beri Beri (vit B2 deficiency).
- Bradycardia (severe).
- Paget's disease (increase osteoclastic activity).
- P.D.A & Truncus arteriosus.
- Pregnancy.
- Thyrotoxicosis.
- 11. Vasodilators.
- 12. Liver cell failure.
- 13. Hypoxia

*Beri Beri:

- Vitamin B1 deficiency
- Lactic acid accumulation leads to Vasodilatation.
- Also, Vit B1 is necessary for the health of capillaries.

*Paget's disease: due to presence of increase osteoclastic activity
healed by granulation tissue lead to Increase number of capillaries
فالدّم المتبقى فى الشريان هيروح لها

*Pregnancy: V.D. & Increase number of capillaries.

*Liver Cirrhosis: release of Vasodilator material

16. What are causes of "small pulse volume"?

- (1) Decrease Filling: - Hypovolemia. - Tachycardia.
 - Cardiac tamponad. - Constrictive pericarditis.
- (2) Decrease Pumping: - Cardiomyopathy. - Myocarditis.
 - Myocardial infarction
- (3) Intracardiac obstruction: Stenotic lesions (As - PS - MS - TS).

17. What are causes of "variable pulse volume"?

- (1) Any irregular rhythm e.g. A.F.
- (2) Some regular rhythms e.g.:
 - Pulsus alternans.
 - Pulsus paradoxus.

18. What is meant by "pulsus alternans"?

Pulse whose volume is alternating between normal & weak. It is caused by severe L.V.F.

19. How to diagnose pulsus alternans by sphygmomanometer?

During measuring ABP, Krotcoff sounds will appear at first as if slow, but with continuing Cuff deflation, sudden Doubling of Krotcoffs sounds rate will occur.

انا هنا عندي 1
Diastole and 2 systole
لما نبيجي نرفع الجهاز وننزل اول حاجه هسمعها
صوت الضربات القويه بس
مش هسمع الضعيفه لان ال
اعلى منها Cuff pressure
لحد ماوصل bradycardia فيديك انطباع ان فيه
لنقطه معينه هيتسمع فيها الضربات الضعيفه والقويه
فارجع ارفع الجهاز تاني واعد الضربات القويه اللي
لوحدها

20. What is the mechanism of pulsus alternans in severe L.V.F?

Due to Heterogeneity of refractoriness of the failed myocardium

نبيضة قوية ونبيضة ضعيفة والمسافات بينهم متساوية. . ليه ؟
الضربة الضعيفة بتكون ب all cardiac muscles except diseased ones that stills in refractory period .
ازاي الضربة القوية بتكون ب all cardiac muscles
تعرفه ؟ بجهاز الضغط .. ارفع لل systole وعد النبضات وبعد كذا فك جهاز الضغط وعد النبضات تاني ..
هتجد ان عدد الضربات زاد لان الضربات الضعيفة ظهرت بعد فك جهاز الضغط.
Causes: it is a diagnostic sign for Severe L.V.F but very rare

21. What is meant by "pulsus paradoxicus"?

-Inspiratory decrease in pulse volume.

It is exaggeration of normal.

It is caused by: - Constrictive pericarditis.

- Cardiac tamponed.

- C.O.P.D

Mechanism

يبقى اللي داخل جوه ال RV ..5. بردو واللي طالع للرنيتين 5 بردو والراجع للقلب تاني 5 بردو
لما تاخذ نفس الدم اللي VR هيزيد هيبقى 8 ويرجع في الاخر للقلب من الرنيتين 8 وده المنطق بس الحقيقه
جاي

ان ده مبيحصلش لان

Lung is expand so accommodate 4 from 8

فيرجع للقلب 4 بس فقوه النبض تقل ده اللي بيحصل طبيعي

In Constrictive Pericarditis, Pericardial effusion

بيضغطوا على RV اكثر من ال LT.V لانه ارفع

So compressed RV accommodate 8 by deviation of septum so capacity of lv
decrease

كده ال 4 تنزل 2 كده قوه النبض تقل زياده

N.B /

الطبيعي ان النبض بيضعف اثناء الشهيق وبالتالي اسم paradoxus غلط لان اللي بيحصل هو زياده

للطبيعي وليس عكس الطبيعي... والاسم الصحيح Pulsus Accentus

In COPD because of increase force of inspiration so lung accommodate 6 from 8

كده ينزل 2 بس لل Lt

ازاي تعرفه ؟ تقيس الضغط اثناء الشهيق ثم اثناء الزفير تجد الفرق في الضغط اكبر من 10 mmHg

22. How to diagnose pulsus paradoxicus by sphygmomanometer?

-Expiratory SBP > Inspiratory SBP by > 10 mmHg.

23. What are abnormal pulse characters?

1. Water hammer pulse AR
2. Bispheriece DA - AR - HOCM
3. Parvus et tardus (plateau): AS.
4. Pulsus alternans
5. Pulsus paradoxicus
6. Pulsus bigeminy.
7. Pulsus trigemini

1- (in AR systolic pressure is increase and DP is decrease cause water hammer
(ضربه قويه)

والدكتور بيقول الخطب الجامد لوحده مش كفايه عشان تتأكد انه water hummer لازم تتأكد انه
بيضرب بقوة ويهوى بقوة

2- Parvus (ضعيف) tardus (sustained)

3-bispheriece (mean double humping) هتلاقى ضربه جامده فى الاول وبعدين الضعيفه
Occur in double aorta and HOCM

24. What is the syn. of w.h.p.?

-Collapsing pulse (when DBP is J, J,).

25. What are causes of unequal pulse volume?

- In the lumen
- In the wall
- Outside the wall
- Thrombus or embolus.
- Dissection or Aortic arch coarctation
- Pancoast tumor or unilateral cervical rib

26. Unequality of pulse... in volume or rate?

-in volume.

ممکن يحصل في ال Rate لو في AF + سبب من أسباب ال Unequality in Volume زي ال Cervical Rib

27. What is meant by "radio femoral lag"?

Unlike normal, simultaneous radial & femoral pulsation shows delay (lag) in the femoral pulse after radial due to interruption of descending aortic flow by:

- Coarctation. - Thrombosis. - Dissection
- .normally the femoral pulsation precede radial pulsation
- لو حصل العكس يبقى في حاجة عطلت ال femoral

28. Where you prefer to comment on arterial wall?

Brachial Artery.... if rigid it may be atherosclerotic.

29. If dorsalis pedis pulse is felt, do you need to palpate posterior tibial artery?

Yes . because D.P. Is not the continuation of P.T., but the anterior tibial

30. What is meant by "force & tension"?

***Force:** Least pressure needed to just occlude the pulse. It is a rough assessment of S.B.P.

***Tension:** Least pressure needed to feel the pulse; it is a rough assessment of DBP.

31. Why we use "palpatory" method before auscultatory method in measurement of abp?

- To avoid underestimation of SBP if "auscultatory Gap" is present.

32. What is the normal ABP?

- Systolic : 100 - 140 mmHg.
- Diastolic : 60 - 90 mmHg.

33. What is the normal temperature?

36.5 - 37.2°C

34. What are the differences between fever and hyperpyrexia?

- Hyperpyrexia > 40°C.

35. What are causes of puffiness of eyelids?

1. Chronic cough (e.g. C.O.P.D).
2. Angioneurotic (Allergic).
3. Myxedema.
4. Renal failure (nephritic - nephritic).
5. Trauma
6. Excessive Crying

36. What are causes of red glazed tongue?

1. Iron deficiency
2. Vit B₁₂ deficiency
3. Liver cell failure.
4. DM.
5. Anticancerous drugs

37. What are causes of bad odor of the mouth?

- | | | |
|--------------------|---|-------------|
| 1. Fetor hepaticus | ~ | L.C.F |
| 2. Amoniacal | ~ | Renal F. |
| 3. Acetone | ~ | DM. |
| 4. Alcoholic | ~ | Alcoholism. |

38. Define jaundice?

-Yellowish discoloration of skin and M.M. due to elevation of serum total bilirubin $> 2.5 \text{ mg \%}$.

39. What is the normal level of serum bilirubin?

* $0.8 - 1.2 \text{ mg\% total}$
(Up to $0.2 \text{ mg\% Direct}$).

40. Why we inspect jaundice in daylight?

Because Yellow lamps produces artificial jaundice.

41. Why we inspect jaundice in "sclera"?

- Because sclera is rich in elastin & elastin has high affinity to bilirubin & because sclera is white.

42. What "other causes" of yellow skin?

1. Hypercarotenemia (palms and soles).

Hypercarotenemia: in palm and sole not present in the Sclera

**فى اللى بياكل جزر وطماطم كثير او مش بيحصل
عنده metabolism of carotene**

- Dark race.
- Renal Failure & Uremia.
- Myxedema.
- Xanthomatosis.

43. Tabulate the difference between different types of jaundice?

	Hemolytic	Obstructive	Hepatocellular
Causes	Excess hemolysis of RBCs >> ↑ hemobilirubin	Obstruction of bile ducts >> ↑ cholebilirubin	Hepatitis , cirrhosis > ↑ both hemo & cholebilirubin
Bilirubin	Indirect	Direct	both
Color	Lemon yellow	Olive green	Orange yellow
Urine	Normal	Dark	Dark
Stool	Dark	Pale	Pale
Others	Pallor, Leg ulcers, ↑ liver & spleen	Biliary pain, pruritus & bradycardia	CP of liver cell failure

44. "Define" cyanosis?

Bluish discolouration of the skin & MM due to elevation of reduced

Hb > 5 gm % in arterial blood of underlying capillaries.

45. What are "causes" of central cyanosis?

- (1) Extensive pulmonary disease.
- (2) Rt. to Lt. Shunt (Fallot 4 - Eisenminger - TGA).
- (3) Polycythemia.
- (4) Liver cirrhosis (LC ~ VDM ~ opening of intrapulmonary Arteriovenous shunts.
- (5) Chemical cyanosis eg Methemoglobinemia & Sulfhemoglobinemia.

دي false cyanosis بيكون ال Hb مش reduced بس في abnormal Hb لونه شبة ال

reduced hb < بيتشخص بال

spectroscope

46. What are "causes" of peripheral cyanosis?

- (1) Cold weather.
- (2) Low C.O. (V.C. of skin).
- (3) Peripheral vascular disease. E.g. Raynaud's & thrombosis.
- (4) Polycythemia.

47. What produces "combined" central & peripheral cyanosis?

- (1) Polycythemia
- (2) Cardiogenic A.P.E.

لما يكون central بيبقى كل حاجه فى العيان زرقه لسانه وضوافره فمينفعش نقول على ضوافره انها peripheral
كلهم بيتقال عليهم central طب امتى بقى نقول peripheral and central

1- In massive pulmonary embolism cause LCOP lead to peripheral cyanosis.

2-acute pulmonary edema from HF which cause LCOP lead to peripheral cyanosis

3-polycythemia

stagnation of blood معاها بيبقى

Peripheral cyanosis occurs when blood stagnation occurs

فدى وقت ان الدم يتاخذ منه الاكسجين للخلايا فيزرق

بيحصل كمان زياده فى total HB من غير مايقلها زياده فى ال oxygenation from lung فال reduced

HB become <5 lead to central cyanosis

And pulmonary edema itself cause central cyanosis

-how differentiate between pure cyanosis and combined cyanosis

لو لقيت ايده سافعه بيبقى combined

48. How to unmask peripheral cyanosis in a patient with combined central & peripheral cyanosis?

- - Cold hands. so warming hands unmask it

49. Can severe anemia produces central cyanosis?

-Never ... as this is incompatible with life.



Because central cyanosis mean reduced HB < 5gm

Severe anemia means HB is 7

يبقى الله يرحمه reduced لما يبقى في 7 منهم 5

50. What is meant by "differential cyanosis"?

-Cyanosis of LLs but not UL.

-It is caused by PDA with preductal coarctation or P.H. (Eisenmenger PDA)

بص ياسيدي لما يكون في PDA الدم بيعدي من ال Aorta لل Pulmonary عشان ال

Aortic is high pressure more than Pulmonary

cyanosis يعني الدم الاحمر هيروح للازرق فمش هيحصل

لما يحصل reversed shunt الازرق هيروح للاحمر ويحصل cyanosis هنعكسها ازاي؟

1.increase P in pulmonary as pulmonary hypertension

2.decrease P in aorta as coarctation of aorta (preductal)

51. Can peripheral cyanosis occurs in tongue?

No ... because peripheral cyanosis is caused by blood stagnation, which cannot occur in the tongue being:

1. Near to heart.
2. Movable organ.
3. Has no sympathetic supply, so, no V.C

4. Present in a closed warm cavity. (VD)

5. Well perfused as double blood supply of the tongue

52. What is the only case in which peripheral cyanosis can occur in tongue.

- Lingual vein thrombosis... localized cyanosis in the tongue.
- S.V.C. obstruction

53. What is the difference between central & peripheral cyanosis?

CENTRAL	PERIPHERAL
Blood pumped in aorta contains more than 5 mg % reduced HB	Stagnation of blood in peripheral circulation leads to extraction of more O ₂
Occurs in tongue differential cyanosis ما عدا في حالات ال ماتظهersh ف ال tongue.	Doesn't occur in tongue
Warm hands (hypoxia cause VD)	Cold hands
Warming hand ~ worsen cyanosis	Improves cyanosis
Arterial O ₂ decreased	Normal.
O ₂ therapies: improves cyanosis (if lung disease) but in congenital HD: no effect	No effect.
Clubbing.	No clubbing
• Polycythemia (1ry & 2ry).	1ry
Hypoxic Hypoxia.	• Stagnant hypoxia

Causes :

- Extensive pulmonary disease.
- Rt to Lt shunt (Fallot 4 - Eisenminger -TGA)
- Polycythemia
- Liver cirrhosis > VDM > opening of A-V shunt
- Chemical cyanosis e.g. Methemoglobinemia & Sulfhemoglobinemia

Causes :

- Cold weather
- Low cardiac output (V.C. of skin)
- Peripheral vascular disease
- Polycythemia

54. What are causes of "butterfly rash"?

1. Malar flush ~ M S with PH). (لونه بنفسجي فاتح لون السما وقت الغروب)
2. S.L.E (Bright red)
3. Myxedema.
4. Cushing , alcoholics, normal variant
5. Pregnancy (Brown).
6. Pellagra (Brown).

55. Where would you like to see pallor?

- Nails.
- Lip.
- Palmar creases.
- Tongue.
- Conjunctiva (not in Egypt, because trachoma produces whitish membrane in eyelid & it is endemic in Egypt).

56. What are causes of "pallor"?

- Anemia.
- L.C.O. (e.g. HF)

57. What is the normal JVP?

* 0-3 cm blood (cm H₂O).

58. What are causes of high JVP (congested neck veins)?

- 1- S.V. obstruction (non-pulsating)
- 2- T.s.
- 3- R.V.F.

- 4- P.S.
- 5- P.H.
- 6- Constrictive pericarditis (associated with 2 signs:
 - Kussmaul sign : inspiratory filling عكس الطبيعي
 - Friedrieich signs: sudden sever diastolic collapse)
- 7- Pericardial effusion

59. What are causes of systolic expansion of n. v.?

- 1. TR.
- 2. AF (with absent A wave).

اللحظة التي بتعمل فيها atrial relaxation عندك regurge يعني رغم وجود relax الدم

1- TR occur pan systolic ال atrium + وبما ان ال

يبرجع ويفضل الضغط جوه ال

syst كده الدم بيرجع من اول لحظه في ال

2-no atrial contraction no A wave, no atrial relax so no X wave.

اذن في 30% محبوسين في ال atrum يعني لما يحصل filling ال atrium هيملى على مليون

يعنى اكثر ويدر

60. What are causes of giant 'A' wave?

- 1. P.H.
- 2. T.S.
- 3. P.S.

61. Which is better to examine IJV or EJV? & why?

*I.J.V. is better because unlike EJV:

- (1) It runs in a direct continuity with S.V.C.
- (2) It has no valves.
- (3) It doesn't pierce deep fascia.
- (4) It is deep to sternomastoid, so, protected from external Compression

62. Which is better to examine Rt IJV.? Or Lt IJV?

*Rt. ... because Lt IJV is connected to S.V.C. by the Lt. innominate vein below which & aortic arch passes & can compress it.

63. What are "causes" of congested non pulsating neck veins?

- (1) S.V.O.
- (2) Cardiac tamponade.
- (3) Severe HF.

64. What are differences between NV and carotid pulsation

NECK VEINS	CAROTID
Anterior triangle lateral to sternomastoid	Posterior triangle medial to sternomastoid
Seen more	Felt more
Pulsatile • wave I cardiac cycle • Main movement: out. • Movement: out-in.	Wavy • 2 waves I cardiac cycle • Main movement: in. • Movement: out-in & up-down.
Not changeable with maneuvers	Changeable with maneuvers: • Position. • Compression. • Respiration. • Valsalva. • Hepatojugular reflux (1 minute test).

65. What are "causes" of carotid shudder (thrill)?

(1) AR. (2) AS (propagated from A₀).

***AR due to increase Blood flow to carotid.**

Common abnormalities in J.V. pulse (abnormal waves)	
1. Absent a wave:	• AF (no atrial contraction)
2. Giant a wave:	• TS • PS • PH
3. Canon a wave:	• Regular ○ Nodal rhythm

	○ Paroxysmal nodal tachycardia • Occasionally : ○ A-V dissociation e.g. paroxysmal ventricular tachycardia & complete heart block
4. Giant v wave or obliteration of x descent:	Systolic expansion; AF, TR
5. Prominent x descent:	• Constrictive pericarditis • Pericardial effusion
6. Prominent y descent:	Constrictive pericarditis
7. Attenuated or absent y descend	Pericardial effusion

66. What are "causes" of spider navi?

- (1) Liver cell failure. (2) Vit B12 deficiency (3) Pregnancy.

67. What is the "distribution" of spider navi?

Areas drained by S.V.C.

68. What is the mechanism of spider navi?

- Estrogen Theory.
- V.D. Theory.

69. DD of spider navi?

Def. dilatation of terminal arterioles & branching capillaries

*shape: spider.

*color: red blanches on compressing in its center.

*size: few millimeters to 2 cm.

- (1) Insect bite **on exposed area**
- (2) Purpura. **Flat, reddish _purple, no effect on compression**
- (3) Cample Morgan's spots. **Normal or in aging Cherry red, 1-3mm size, no effect on compression.**
- (4) Venous star.
Purplish color, few millimeters too few inches in size
Distributed in ant.chest wall& lower limbs
 - center compression no effect
 - Diffuse compression blench it.

70. What are "most important causes" of gynecomastia?

Def:

Gynecomastia is triggered by a decrease in the amount of the hormone testosterone compared with estrogen. The cause of this decrease can be conditions that block the effects of or reduce testosterone or a condition that increases your estrogen level. Several things can upset the hormone balance

- (1) Liver cirrhosis (Estrogen effect).
- (2) Digitalis (Estrogen like)
- (3) Spironolactone (Antiandrogen).

71. "How to diagnose" Gynecomastia?

- Firm tender disc beneath the nipple.

72. What are causes of tender edema LL?

- (1) Traumatic.
- (2) D.V.T. **acute**
- (3) Cellulitis.

73. Where we elicit pettiness in L.L edema first?

- Medial Malleolus.

74. How to elicit pettiness OF edema in thigh & abdomen?

* Pinching

75. If no ankle edema, does that mean that the patient has no edema?

*No ... sacral edema (not ankle edema) is present in bedridden patient.

76. What are causes of "bilateral" edema L.L?

(A) Causes that increase hydrostatic pressure in capillaries:

- (1) Heart failure.
- (2) Pregnancy (Local cause).
- (3) Orthostatic
- (4) Steroidal & non-steroidal anti-inflammatory drugs.
- (5) Renal failure.

(B) Causes that decrease Osmotic pressure:

- (1) Long standing protein malnutrition
- (2) Chronic liver disease.
- (3) Protein losing nephropathies (e.g. Nephrotic).

(C) Increased Capillary permeability:

- (1) Angiogenesis.
- (2) Vasodilators.

(D) Lymphedema & myxedema.

77. What is mechanism of clubbing?

-Chronic toxemia or chronic hypoxia irritation of nail bed proliferation of nail bed (old mechanism).

New shunt theory

Megakaryocytes would normally break up in the pulmonary capillaries to the platelets but in the presence of shunts or abnormal circulation within a neoplasm, these megakaryocytes bypass the pulmonary capillaries and reach the systemic circulation to preferentially lodge in the tips of the digits. These cells locally release Platelet Derived Growth Factor (PDGF) and VEGF along with other mediators that increase endothelial permeability and activate connective tissue cells including fibroblasts. Though widely accepted, this theory is unable to explain clubbing attributed to other several causes.

79. What are grades of clubbing?

- I. Nail angle obliteration.
- II. Parrot peak.
- III. Drum stick.
- IV. Pulmonary osteoarthropathy

80. What is the test that detects mild clubbing?

Fluctuation test.

The patient's fingertip is placed on the pulp of examiner's two thumbs and held in this position by gentle pressure with the tips of examiner's middle fingers applied on the patient's proximal interphalangeal joint. The patient's finger is then palpated over the base of the nail by the tips of examiner's index fingers. There is increased fluctuation of the nail bed in clubbing due to softening of the nail-bed.

81. What are cardiac causes of clubbing?

1. S.B.E. (**Toxins**)
2. Congenital Cyanotic H.D.

82. What are "chest causes" of clubbing?

- Cryptogenic fibrosing alveolitis
- Suppurative lung syndrome.
- Br. Carcinoma.
- Mesothelioma.

83. What are "abdominal causes" of clubbing?

1. Bilharzial polypsis.
2. Primary biliary cirrhosis
3. Inflammatory Bowel disease.
4. Steatorrhia

84. What are causes of "palmar erythema?"

- | | | |
|---------------------|-------------------------------|-------------------------|
| 1. Liver cirrhosis. | 2. Thyrotoxicosis. | 3. Tuberculosis. |
| 4. Reticulocytosis. | 5. Rheumatoid arthritis. | 6. Vit. B12 deficiency. |
| 7. Pregnancy. | 8. Prolonged A C T H therapy. | 9. Normal. |

85. What are causes of flapping tremors?

End organ failure:

- L.C.F. **Anemia**
- Renal F.
- Respiratory F. (**co2**)

*-toxins affecting pathway of deep sensation to thalamus to cortex
-metabolic encephalitis as general
-end organ failure as specific*

86. What are causes of spooning of nail?

Iron deficiency anemia.

87. What are causes of white nail?

1. Hypoalbuminemia.
2. Normal.

88. What are cardiac causes of jaundice?

1. Rt sided HF ~ liver congestion.
2. Prosthetic valve ~ hemolysis of RBCs.
3. Pulmonary. Infarction.

89. Duputryn's contracture occurs with what?

1. Alcoholic liver cirrhosis. **Abuse**
2. DM. **non controlled**

*A **fibrosing** disorder that results in slowly progressive thickening and shorting of the **palmar fascia** and leads to debilitating digital contractures, particularly of the palm of the hand this condition usually affects the fourth and fifth digits (the ring and small fingers).*

CARDIOLOGY

1. What produces "precordial bulge"?

Def: area of chest overlying the heart

(From 2nd to 6th costal cartilage, from 1st sternal border to mcl)

-Right ventricular enlargement ... dating back to the childhood ... due to congenital or rheumatic heart disease.

2. Define "apex of the heart"?

- Outermost, lowermost, palpable visible, strong, pulsating point on the chest wall.

3. What are causes of "out" displacement of cardiac apex?

1. Right ventricular enlargement.
2. Extra cardiac causes:
 - Lt. Lung fibrosis or collapse (pulling the heart).
 - Rt. pleural effusion or pneumothorax (pushing the heart).

4. What shifts the apex of the heart "out & down"?

Lt. Ventricular enlargement.

5. Systolic "bulge" of the apex is caused by what?

- Normal, or Lt. ventricular enlargement.

6. Systolic "retraction" of the apex is caused by what?

-Marked Rt. Ventricular enlargement.

7. What are "localized" and "diffuse" apex?

Localized	Diffuse
Well defined	ill defined
Occupies 1 space (usually)	Occupies > 1 space
Caused by - L.V.E - Normal	Cause by - R.V.E.

8. What are "characters" of the apex?

- **Normal:** Gentle brief impulse
- **Hyper dynamic:** Forcible, non-sustained= Volume overload on L.V.
- **Heaving:** Forcible, sustained= Pressure overload on L.V.
- **Slapping:** Brief+ Palpable SI = Mitral stenosis

9. What produces "thrill on the apex"?

- Systolic thrill = MR.
- Diastolic thrill = MS.

10. What is the cause of "Lt Parasternal uplift"?

(1) Rt. Ventricular enlargement.

What else? (2) Marked Lt. atrial dilatation due to severe MR.

11. What is the cause of "pulmonary pulsation"?

Palpable s2 over pulmonary area and is caused by pulmonary hypertension.

13. What produces thrill on cardiac base"?

Grade of murmur 4/6 at least

***Due to organic & not functioning valve disease.**

- Systolic thrill over pulmonary area = P.S.
- Systolic thrill over Aortic area=A.S.

14. Causes of 'epigastric pulsations'?

***Below the costal margin**

Look tangential وقول للعيان يوقف نفسه وريح ايدك ع بطنه وزق صوابك ف ال epigastrium

- From fingertips = R. V.E.
- From palm = Aortic pulsation.
- From right side = Hepatic pulsation.

15. Causes of aortic pulsations:

- Aortic regurge (due to big pulse volume).
- Aortic aneurysm.

16. "Most important" cause of "hepatic pulsation"?

-Tricuspid regurge.

17. What is the difference between?

- Systolic (= ventricular= Arterial) hepatic pulsation.
- Pre systolic (=Atrial= Venous) hepatic pulsations.

Systolic	Presystolic
Caused by TR	Caused by TS
Coincide with "S 1"	Precedes "S 1"

18. What are causes of invisible - impalpable apex?

1. Obesity.
2. Lies behind rib.
3. Pl. effusion.
4. Pl. thickening
5. Pneumothorax.
6. Emphysema.
7. Pericardial effusion.
8. Weak contraction
9. Dextrocardia.

19. Causes of dullness outside Rt. Sternal border (Rt border of the heart)?

1. Rt. Atrial dilatation.
2. Other causes:
 - Pericardial effusion.
 - Chest causes (fibrosis - collapse - effusion).
 - Dextrocardia.
 - What else?
 - Aneurysm of the aortic root.
 - Giant left atrium.

20.* How to differentiate between pericardial effusion and pulmonary dilatation as a cause of dullness on pulmonary area?

When we re percuss pulmonary area after the patient sits, it is turned to resonant in case of pericardial Effusion.

This is due to reshaping of cardiac borders caused by effect of gravity on the fluid ... This may be termed "shifting dullness".

21. What are causes of dullness "outside cardiac apex"?

- Pericardial effusion
- Chest causes (fibrosis - collapse - consolidation - effusion).

22. What are causes of enlarged bare area with stony dullness?

- Rt. Ventricular enlargement.
- Pericardial effusion.
- Chest causes (fibrosis - collapse - consolidation - effusion).

23. Where would you percuss lower end of sternum?

- Rt part of lower end of sternum.

24. What is the significance of stony dullness in lower end of the sternum? & what it's normal?

- Huge right ventricle
- Chest causes.
- Pericardial effusion.
- Normally it is resonant by light percussion.

24. What is the significance of stony dullness in lower end of the sternum? & what it's normal?

- - Huge right ventricle
- Chest causes.
- Pericardial effusion.
- Normally it is resonant by light percussion.

25. Percussion of bare area is heavy or light?

Light percussion.

26. Using percussion, what is meant by "obliterated waist"?

- Dullness in the Lt. 3rd space measures from the midline $> 1/2$ the distance between midline and apex (about 4.5 - 5 cm) (better radiological). This means:

- Lt. atrial dilatation.
- Pulmonary dilatation.
- Pericardial effusion.
- Chest causes.

27. What is the "extent of bare area"?

From 4th - 6th rib (4th & 5th space) & from midline & Lt. Parasternal line

(2.5 cm in 4th space & 5 cm in 5th space).

28. What is meant by "tidal percussion"?

-After detecting dullness at the base of the right lung.... (Using heavy percussion) we asked the patient to "INSPIRE DEEPLY" & re percuss.

If turned to resonant = infradiaphragmatic dullness.

If still dull it may be:

- Supradiaphragmatic (1 space above is resonant).
- Diaphragmatic paralysis (1 space above is dull). (This is called reversed tidal percussion).

Value Of Tidal Percussion

- differentiate between supradiaphragmatic & infradiaphragmatic dullness
- indicate the diaphragm is freely mobile
- reversed T.P = diaphragmatic paralysis

29. What are signs of "Rt. Ventricular enlargement"?

1. **Apex:** Diffuse, systolic retraction, ~~shifted~~ out.
2. **Lt Parasternal uplift.**
3. **Epigastric pulsations coming from fingertips.**
4. **Precordial bulge.**
5. **Large & stony dull bare area.**
6. **Stony dullness at lower sternal border.**

30. What are signs of "Lt. Ventricular enlargement"?

- **Apex:** - Shifted out & down.
 - **Hyper dynamic:** If dilatation.
 - **Heaving:** If hypertrophy.

31. What are causes of "volume overload on LV."?

***AR-MR- VSD-PDA.**

32. What are causes of "pressure overload on LV"?

AS - Aortic Coarctation - Hypertension.

33. Causes of "right ventricular enlargement"?

- **Dilatation** **Volume overloads e.g. TR-ASD.**
- **Hypertrophy** - **Pressure overload e.g. PS – PH.**

34. "Causes" of pulmonary hypertension?

- **Lt Sided heart failure.**
- **Extensive cardiopulmonary disease (:= Cor pulmonale).**
- **Lt. to Rt shunt due to lung plethora leading to reversal of the shunt = Eisenminger's syndrome.**

35. ** "Signs" of pulmonary hypertension?

- **Neck veins:** Giant 'a' wave.
- **Inspection & palpation:**
 - Pulmonary pulsation.
 - Diastolic Shock.
- **Percussion:** Dullness on_ pulmonary area.
- **Auscultation:**
 1. Accentuated pulmonary component of S2.
 2. Close splitting of S2
 3. Murmur of PR (Graham steel murmur) due to dilatation of pulm. Ring (Early diastolic soft murmur).long standing pulmonary hypertension (severity)
 4. Murmur of functional pulmonary stenosis (Ejection systolic).
 5. S4 on tricuspid area.

36. ** causes of "accentuated" 1st heart sound?

- (1) MS (2) TS
- (3) Tachycardia. (4) Hyper dynamic circulation.
- (5) Short PR interval (Cannon Sound).

37. Causes of "variable" s1:

- Irregular rhythm e.g. AF. - Cannon Sound (C.H.B).

38. Causes of "pan systolic" murmur?

- MR -TR - VSD.

39. Causes of "ejection" systolic murmur?

- AS •PS

40. Causes of diastolic murmurs?

- **Early diastolic:** - AR - PR (Graham Steel).
- **Mid diastolic with presystolic accentuation:** - MS -TS.

41. "match" the following:

- a. MS (1) Pan systolic murmur - soft.
- b. MR (2) Ejection systolic harsh murmur.
- c. AS (3) Early diastolic soft murmur.
- d. AR (4) Mid-diastolic rumbling with presystolic accentuation.

a (4) b (1) c (2) d (3).

42. ** what is "Carvallo's sign"?

- Murmur of T.R. Becomes louder after deep inspiration.

43. ** what is the "grade" of this murmur?

-Associated with thrill: grade>4

-no thrill: grade<4

44. ** what are peripheral signs of TR?

- Systolic expansion of N.V.
- Systolic hepatic pulsations.

45. What are peripheral sings of aortic regurge?

3 Neck:

- (1) Visible carotid pulsation (Corrigan's sing).
- (2) Systolic nodding of the head (De Musset sign).
- (3) Systolic thrill over carotid a. (Carotid shudder).

3 UL:

- (1) Jerky pulsations felt in the palmar surface of the elevated arm (Water hammer or collapsing pulse).

- (2) Wide pulse pressure (>60 mm Hg) with low diastolic Bp (<60 mmHg).
- (3) Digital pulsation or capillary pulsation (Quinck's sign).

46. What is the definition of rheumatic fever?

It's a systemic inflammatory disorder characterized by affection of the collagen of various body structures 2ry to streptococcal infection.

47. What are criteria of rheumatic fever?

- **Major criteria:**

- (1) **Pericarditis: peri, myo & endocarditis,**

It cause exudative lesion with no residual fibrosis...so it never turn to constrictive pericarditis. But it cause severe affection of endocardium ending with valvular lesion.
(e.g. MR- MS)

- (2) **Fleeting arthritis: affect big joints > small.**

How: it affect for example wrist joint causing redness, hotness, swelling, limitation of movement...then it leave this joint to another one as elbow ...etc.

- Dramatic response to salicylates. (Aspirin) - Never associates chorea.

- (3) **Subcutaneous (Ashoffs) nodules.**

- (4) **Erythema marginatum:**

Painless non tender red spots over the trunk & proximal extremities in crops. With serpiginous margin & expands from periphery & fades from the center.

- (5) **Chorea:** semipurposefull jerky movement that occurs proximal more than distal & more in female & never associates arthritis.

- **Minor criteria:**

- (1) **Fever.**

- (2) **Arthralgia** (joint pain but without clinical signs of inflammation e.g. Redness - Hotness- Swelling- Limitation of function as arthritis).

- (3) **Elevation of erythrocytic sedimentation rate (ESR) - C-Reactive protein- Antistreptococcal- 0-titre (ASOT) (rising rather than high).**

- (4) **Epistaxis.**

- (5) **Previous history of rheumatic fever. (For rheumatic activity).**
Previous similar attack of rheumatic fever.

47. How to diagnose rheumatic fever?

-It is diagnosed by the presence of 2 major criteria or 1 major + 2 minor criteria.

e.g. : {valvular lesion (endocarditis) major} + {arthritis (major)}

OR

{Arthritis (major) + fever (minor) + previous attack (minor)}

If arthritis came with arthralgia ...it's considered major.

49. What is the difference between Rheumatic Fever, Rheumatic heart & Rheumatic activity

- **RHEUMATIC FEVER**: It is the first attack of Rh. Fever (Define it).

- **RHEUMATIC HEART**: It is the scar (lesion) left by the rheumatic fever in the form of valvular affection. Permanently.

- **RHEUMATIC ACTIVITY**: Is Rheumatic fever on top of rheumatic heart or the attack of rheumatic fever other than the 1st attack. Acute on top of chronic.

50. What is the treatment of rheumatic fever?

1) **PROPHYLACTIC** : (to prevent rheumatic fever)

- 1) Long acting penicillin 1.200.000 u/month or 21 days or 15 days.
- 2) Tonsillectomy. For chronically infected tonsils

(2) **CURATIVE**: **only supportive**:

- 1) Complete physical & mental rest.
- 2) Diet: Salt restriction to avoid HF. (embolizing HF)
- 3) Drugs:
 1. **Corticosteroids**:
 - Best for carditis.
 - Large dose.
 - Gradual withdrawal to avoid rebound.
 2. **Salicylates**: - Best for arthritis - Large dose.

3. Antibiotics. **To eradicate strept. Infection.**

51. What are complications of rheumatic (valvular) heart disease (MS - AS- MR?)

- (1) Heart failure (RT sided or Lt sided according to the cause).
- (2) Rheumatic activity.
- (3) Infective endocarditis. **(As the heart became diseased which allow infection to take place so easily)**
- (4) PH: **pulmonary hypertension.** (If Lt. Sided HF esp. MS).
- (5) D.V.T & plum-embolism due to prolonged bed rest. **During the attack.**
- (6) Arrhythmia e.g. AF with MS that leads to left atrial thrombus that may complicate by embolic manifestations e.g. embolic hemiplegia

52. What is the treatment of rheumatic (valvular) heart disease?

(1) TREATMENT OF COMPLICATIONS:

- **Heart failure:**
 - (1) Bed rest. **To decrease the cardiac muscle needs.**
 - (2) Salt restriction. **To decrease preload on the heart.**
 - (3) Drugs:
 1. Diuretics.
 2. Dilator; vasodilators (not in AS or MS)
 3. Digitalis.
- **Rheumatic activity:** As rheumatic fever.
- **Infective endocarditis:** Antibiotics according to culture & Sensitivity. **Start treatment immediately once you suspect it and never wait for the results of the culture ...to avoid it's serious effect.**
- **DVT & Pulm. Embolism:** Heparin. **(Anticoagulant)**
- **AF:** Digitalis to reduce the rate - Anticoagulation.
(To avoid thrombosis)

(2) TREATMENT OF THE CAUSE:

- **Valve replacement:** For-calcific valve stenosis - severe valve Incompetence & double valve lesions.
- **Valve repair:** For valve incompetence.
- **Valvotomy:** Surgical or catheter balloon for valve stenosis.

53. Investigations of a cardiac CASE?

(1) Chest X-ray: To detect:

1. Chamber enlargement.
2. Pulmonary congestion or edema.

(2) ECG: • To detect:

1. Arrhythmia.
2. Chamber enlargement.

(3) Echocardiography: To detect:

1. Chamber enlargement.
2. Valvular affection:
 - Type
 - Degree.
3. Intracavitary masses:
 - Thrombus.
 - Tumor
4. Vegetation of endo carditis.
5. Myocardial function:
 - Systolic.
 - Diastolic
6. Pericardial Disease:
 - Effusion. (**Tapping**)
 - Constrictive pericarditis.
 - (**Pericardiectomy is the definitive therapy**)
7. Congenital abnormalities.

(4) Cardiac Enzymes CPK- LDH: they increase in Myocardial infarction.

(5) Cardiac Catheterization.

54. What are cardiac causes of jaundice?

1. Liver congestion& cirrhosis due to Rt sided heart failure.

When congestion occurs the cells become edematous leading to impaired function, also it compresses the sinusoids led to intra hepatic cholestasis.

2. Pulmonary infarction the resulting RBCs rupture (hemolysis)...leading to jaundice.

3. Hemolysis of RB Cs on a mechanical valve...the metal cause breaking down of RBCs.

55. Cardiac causes of fever?

1. Rheumatic fever or activity.
2. Infective endocarditis.
3. Chest infection. That result from pulmonary edema in case of developing LSHF.
4. MI: that occurs due to ischemia of the cardiac muscle in case of decompensated hf.
5. DVT: due to prolonged stay in bed in case of rheumatic activity or infective endocarditis.etc.

CHEST

1. ** what is the surface anatomy of "right lung"?

4 cm above medial 1/3 of clavicle - sternoclavicular junction - Angle of Louis in Midline
- Midline (6th rib) - MCL (6th rib) -

MAL (8th rib)- SL (10th rib)- PVL (10th rib).

2. ** What is the surface anatomy of "Lt. Lung"?

-As right lung, but ML in 4th rib **because of the heart.**

3. ** what is surface anatomy of "oblique fissure"?

Start at 2nd thoracic spine & pass around lateral chest wall to MCL at 6th space passing parallel to "medial scapular border" then "5th rib in MAL".

4. ** what is the "interscapular region" formed of?

Apical segments of lower lobes.

5. **examine lower lobes equals what?

Equals "Examine the back".

6. Surface anatomy of "Kronig's isthmus".

- 4 points
- Spine of C7.
- Sternoclavicular junction.
- Junction between lateral 1/3 & medial 2/3 of clavicle.
- The middle of scapular spine.

7. Describe "barrel chest"

- Anteroposterior Diameter > Transverse.
- Wide subcostal angle.
- Horizontal ribs.
- Chest moves up & down as a one unit due to overaction of accessory muscles of inspiration. **Sternomastoids, scalene, trapezii (pump handle movement)**
- Symmetrical.

8. What is the cause of "barrel chest"?

Hyperinflation e.g. Emphysema...(Most probable cause)

9. What "other" symmetrical chest shapes?

1) Elliptical: Normal.

Mean ratio between anteroposterior diameter (from ant axillary line to post axillary line) and transverse diameter (from ant to ant axillary line) = 5/7

2) Pectus:

-Rickets. -Severe respiratory distress since childhood e.g. "Bronchial asthma".

- Osteomalacia - Marfan's syndrome

Pectus mean bulging of sternum and adjacent costal cartilage with Harrison sulcus along origin of diaphragm and everted lower costal cartilage

بص ياسيدى المناديل البكره لما تخلص بيبقى فى كارتونه كده فى الاخر دى لما تضغط عليها تعمل بوز من قدام وورا
اما ال chest لو ضغط عليه يعمل بوز من قدام بس لانه ال vertebrae من وراه قويه جدا
اللى بيضغطه حاجتين اتنين

-1 عظم الصدر طرى جدا جدا فلما يحصل contraction of diaphragm يطبقه فى حالات ال rickets and osteomalacia

-2 او عظم الصدر طرى بس مش جدا فى الاطفال بس فى

Forced diaphragmatic contraction as in case of bronchial asthma in children

3) Pectus excavatum:

- Congenital - Shoemaker.

Mean localized depression of lower end of the sternum

4) Alar (flat): Normal

Means decrease of anteropost diameter < 5/7.

5) Kyphosis.

10. How to differentiate normal from abnormal hemithorax (bulge & retraction) clinically?

The side of restricted chest expansion, is the abnormal one, it may be bulge or retraction

11. What are causes of unilateral chest bulge & retraction?

- Bulge: Pleural effusion & pneumothorax.
- Retraction: Lung fibrosis, collapse.

12. What are causes of "abdominal" respiratory movement?

Due to limitation of intercostal as:

- Pleurisy. (**Pain limitation**)
- Intercostal muscle paralysis. (**Neuromuscular limitation**)
- Ankylosing spondylitis. (**Mechanical limitation**)
- Severe emphysema. (**fixed inspiratory position cause mechanical limitation**)

13. What are causes of "thoracic" respiratory movement?

Due to limitation of diaphragm as:

- Tense ascites >> **mechanical limitation**
- Diaphragmatic paralysis >> **neuromuscular limitation**
- Peritonitis. >> (**pain limitation**)

14. What is the normal respiratory rate?

14- 20 / minute

15. * What are causes of "bradypnea"?

Due to inhibition of respiratory Center as:

- Increased intracranial tension
- Morphine toxicity.
- Barbiturate toxicity.

16. ** What are causes of "rapid deep" breathing?

- Metabolic acidosis (e.g. Diabetic ketoacidosis & Uremia).
 - Massive Pulmonary embolism.
 - Exercise. (Increase consumption of O₂ and increase CO₂)
 - Emotional stress. (Due to increase ventilator drive)

17. ** What are causes of "rapid shallow" breathing?

Shallow due to restrictive mobility and rate increase due to hypoxia in

- Extensive pulmonary diseases.

18. ** What are "accessory muscles of inspiration"?

- Sternomastoids.
- Scaleni.
- Trapezi.

19. ** What is the aim of "pursing of lips"?

- To keep intrabronchial pressure high avoiding bronchial collapse During forced expiration.
- This sign occurs with "obstructive airway disease" e.g. C.O.P.D & Bronchial asthma

20. ** What is Litten's sign?

- **Normally:** a rippling shadow is seen down the lower intercostal Following diaphragmatic descent during deep inspiration in thin individual.
- **Litten's sign:** is unilateral absence of this shadow & it is caused by:
 - Diaphragmatic paralysis.
 - Lower lobar pathology or infradiaphragmatic pathology that interferes with diaphragmatic descent (Sabara's 2nd edition ... American book).

الدكتور يقول انها بتشرح في كل الجامعات غلط و الصح ان
الانسان الطبيعي ان ال diaphragm لما ينزل مع النفس يعمل
Negative pressure فيسحب ال intercostal معاه وتسمى

Inspiratory retraction

لو واحد عنده pleural effusion or pneumothorax
ال diaphragm

لما ينزل اثناء النفس مش هيبقى فيه pressure من المياه والهوا اللي موجودين
فيحصل negative inspiratory retraction

Which occurs also with obesity

And exaggerated inspiratory retraction occurs during over action of inspiration

في حاجه كمان ان ال diaphragm بيطلع على intercostal لبره فتشوف ال shadow of diaphragm مش
retraction بس ده محتاج واحد

Very thin and take deep inspiration this called lettin's phenomena

When absent called litten sign

In 1- diaphragmatic paralysis

2-Subphrenic abscess

3- Lower lobar pathology

2, 3 cause interference of diaphragmatic movement

21. Importance of examination of "cardiac pulsation" in chest patient?

- Invisible apex: - Emphysema.
 - Lt sided effusion or pneumothorax.
- Causes of apical shift are caused by:
 - Lesion pulling the heart: fibrosis - collapse.
 - Lesion pushing the heart: effusion or pneumothorax.
- Signs of PH & RVF.

22. causes of shifted trachea?

- Lung fibrosis or collapse: to same side.
- Pl. effusion or pneumothorax: to other side.

23. Causes of "tender" chest wall?

- Pleurisy (lower axillary – beneath breasts).
- Myositis. • Osteomyelitis.
- Costochondritis (Teitz's disease).
- Thrombophlebitis (Monder's disease).
- Leukemia (Tender sternum).
- Herpes Zoster (unilateral - dermatomal).

24. "Tactile vocal fremitus" is "increased" by what?

- Consolidation.
- Cavitation.
 - Other causes
 - Collapse with patent main bronchus.
 - Upper level of pleural effusion.

palpable = tactile كلمة

Fremitus=vibrations

يبقي اللي محسوس باليد دا Tactile Vocal Fremitus نذبذبات صوتية محسوسة

لما تحط ايدك علي صدرك الصوت هيصغف ليه؟

لان الصوت لما يعدي علي ال lung بيضعف ليه؟ لكونها heterogeneous media زي السفنجة عبارة عن tissue وهوا ودا يشتت الصوت ويضعفه لانها تنفذ ال low frequency sound

ولا تنفذ ال high frequency sound دي الرنة بتعمل كدا

لو انت استبدلت ال heterogeneous media ب homogenous media زي ال

Consolidation ما هو ال consolidation ؟

ال hepatization اللي هو ال alveoli بدل ما يكون فيها هوا يكون فيها cells وياما الخلايا دي

تكون RBCs وتسمي Red hepatization

او pus cells & fibrin وتسمي Grey hepatization

يبقي اول حاجة تخلي ال lung homogenous هو ال consolidation

25. "Tactile vocal fremitus" is "decreased" by what?

- Obstructive airway disease eg:
 - Severe bronchial asthma.
 - Obstructive lung collapse .
- Barrier e.g.
 - Obesity. - Pl. effusion. - Pneumothorax.
- Lung tissue destruction e.g.: - emphysema or lung collapse.

26. Causes of "palpable rhonchi"?

*Obstructive airway disease e.g.:

- Bronchial asthma. - C.O.P.D.
- F.B. - Tumor. - Secretions.

27. What are causes of "limited chest expansion"?

- **Bilateral:**
 - Emphysema.
 - Lung fibrosis.
- **Unilateral:**
 - Plural effusion.
 - Fibrosis.
 - Pneumonia.
 - Pneumothorax.
 - Collapse.

28. Trail's sign?

- Unilateral bulge of sternomastoid tendon due to marked tracheal shift.

29. Causes of dullness on lung?

- Fibrosis. • Collapse. • Consolidation.
- Abscess. • Tumor.

30. Causes of "stony dullness" on lung?

- Pleural effusion.

31. What is meant by "hyper resonant" lung?

This means that dullness of bare area and/or upper hepatic border are encroached by pulmonary resonance, due to hyperinflation of the chest, by emphysema & pneumothorax.

32. What are causes of dullness on "Kronig's isthmus"?

- 1) Pancoast tumor

زمان كانوا يفتحوا ال chest من تحت ال clavicle وينسوا ال apex لحد مالو حظ ان في بعض الامراض بتيجي apical فقط من ضمنها

Pancoast tumor*

في *malignant tumor

اسمه bronchogenic carcinoma

لو ضربت ال apex تسمي

Superior sulcus syndrome-

س/ليه سموه -syndrome

Bronchi: dyspnea-

Esophagus: dysphagia-

Recurrent laryngeal: hoarseness-

Thorathic duct: lymphedema of upper-

Sympathetic chain: Horner syndrome (ptosis, miosis, anhidrosis and.....)-

لوضرب اكثر ال -sympathetic chain

اسمه pancoast tumor

Its bronchogenic carcinoma affecting apex of lung and invading the sympathetic chain >>>Horner syndrome

يعني مفيش pancoast tumor من غير Horner syndrome

بس هوال commonest علشان كذا هو المشهور

2) Friedlander's bronchopneumonia (klebsiella pneumonia).

3) T.B bronchopneumonia,

4) Apical lung fibrosis (e.g. T.B).

5) Apical lung abscess (e.g. T.B).

6) Apical lung collapse.

7) Apical pleural thickening.

8) Apical encysted pleural effusion.

33. Surface anatomy of traub's area?

- | | | | |
|-----------|---|----|-----|
| • 6th rib | - | Lt | MCL |
| • 9th rib | | Lt | PSL |

- 9th rib Lt MAL
- 11th rib Lt MAL

34. What are borders of "traub's area"?

- **Upper border:** Lower border of Lt "Lung".
- **Lower border:** Lt "Costal Margin".
- **Left border:** Anterior border of "Spleen".
- **Rt. border:** Lower border of Lt Lobe of "liver".

35. Contents of "traub's area"?

- Fundus of stomach.
- Lt Pleura.

36. Note of percussion of normal traub's area?

Tympanetic resonant.

37. Causes of dullness on traub's area?

1. Splenomegaly (< 3 times normal size).
2. Hepatomegaly (Lt. Lobe).
3. Ascites.
4. Pregnancy.
5. Pleural effusion.
6. Pericardial effusion.
7. Full stomach.
8. Fundal tumor.
9. Situs inversus totalis.

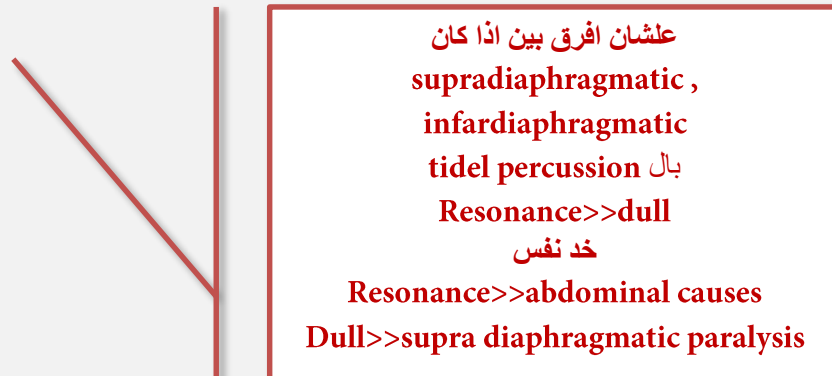
Liver مكان ال stomach
Head of pancreas مكان ال tail
appendix مكان ال sigmoid
Truab's area مبيتغيرش مكانها لانها اماكن محدده مش
organs

38. "Physiological" causes of dullness on traub's area?

- Full stomach. • Pregnancy.

39. How to differentiate supradiaphragmatic (chest) causes from infradiaphragmatic (abdominal) causes of dullness on traub's area?

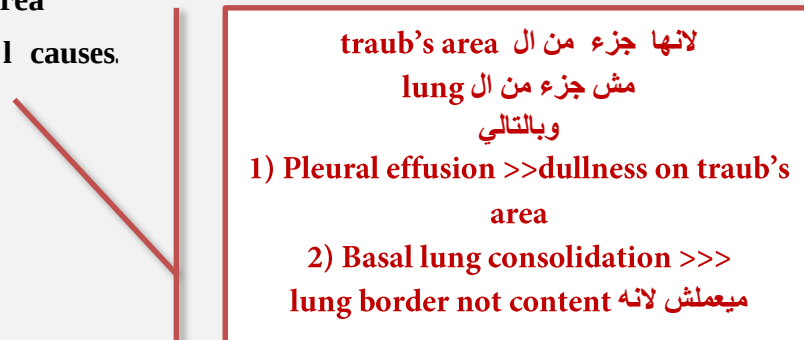
By tidal percussion.



40. How to differentiate "pleural" causes from "pulmonary" causes of dullness at base of left lung?

Percuss Traub's area

Dullness = pleural causes.



41. What are causes of enlarged traub's area?

1. Splenectomy.
2. Shrunken liver.
3. Pneumoperitoneum.
4. Dilated stomach.
5. Pneumothorax.

42. How to diagnose hydropneumothorax by percussion?

- By shifting dullness technique using one of three methods:
 - 1 From the back.
 - 2 From in front (2 directions). As **ascites**

Ventricular Enlargement: in a chest case may indicate corpulmonale

57. What are types of crepitations?

• According to timing: for large bronchi

Early inspiratory = Bronchial disease (**for large bronchi**) (**usually obstructive pathology**)

Late inspiratory = alveolar disease (**for bronchioles & alveoli**) (**usually restrictive pathology**)

• According to type & number:

- Coarse (**low pitched & loud**) Scanty **اقل من 3 تكات**
- Fine (or medium) (**high pitched & soft**) Profuse **اكثر من 10 تكات**

• According to Quality:

- Consonating (metallic **quality**) - Lung tissue destruction eg pneumonic consolidation.
- Non Consonating, e.g. pulmonary edema

58. What are causes of fine (or medium) late inspiratory crepitations?

1- Interstitial lung fibrosis. (**Rigid air way**) **لانها**

-It usually pan-inspiratory with late inspiratory accentuation.

[....(**rigid airway**) **لانها**

3- Pneumonic consolidation (medium -consonating).

(**Sticky air way**) **لانها**

4- Lung abscess (coarse late inspiratory).

5- **Reflation of previously collapsed lung (resolving pneumonia)** **تففل بسهولة وتفتح بصعوبة ومتاخر**

59. What are causes of early inspiratory (coarse) crepitation?

- 1- Bronchiectasis (Mid-inspiratory). **Bubbling in fluid containing cavity**
- 2- Bronchitis. **Secretion** يعمل sticky airway
- 3- Bronchiolitis. **Secretion** يعمل sticky airway
- 4- Bronchial asthma. **Secretion** يعمل sticky airway
- 5- Acute pulmonary edema. **Bubbling in fluid containing cavity**
- 6- **Localized lung fibrosis (rigid airway لانها)**

60. What are causes of pleural rub?

-Pleurisy. (**Friction and rubbing between inflamed roughened visceral and parietal pleural surfaces**)

61. D'ESPIN SIGN?

Bronchial breathing (or whispering pectrolioqy) below body of T4

Vertebra (spine of T2) caused by conduction of the sound of bronchi at the carina through large mediastinal mass e.g. L.N. Or tumor **to vertebral column.**

62. What are special tests in chest auscultation?

- **D'Espin Sign:** Mediastinal mass.
- **Coin test:** for pneumothorax
- **Succussion splash:** for hydro pneumothorax.
- **Post tussive suction:** for lung abscess

WATERFALL SIGN: for pneumothorax

63. What is meant by "vocal resonance"?

While I'm auscultating the chest, I'll ask the patient to say "44" once in a clear normal voice (**low pitched**) and once in a whispering voice (**high pitched**)....

- **Normal V.R.:**

- Clear normal voice: Audible fuzzy & muffled. (Lung filter high pitched sound)
- Whispering: Inaudible. (Lung filter high pitched sound)

•High V.R.:

- Clear normal voice: Audible Clearly. (= Broncho phony).
- Whispering: Audible. (= whispering pectoriloquy)
 - Causes: Same causes of bronchial breathing (e.g. cavity & Consolidation). So used to confirm it

•Low V.R.:

- Clear normal voice: Inaudible.
- Whispering: Inaudible.
- Causes: same causes of diminished intensity (e.g. Barrier - Obstruction). So used to confirm it

•Aegophony:

- Clear normal voice: Nasal tone. (High pitched)
- Causes: - Consolidation.
- Upper level of pleural effusion.

الخلاصة

الست باتس وده اشهر كتاب في الشيسيت قالت ايه
بالسماعه والعيان يقول 4 4

لو حسيت ان الصوت جاي من Chest piece يبقى Normal intensity

لو حسيت ان الصوت جاي من Ear piece يبقى Loud intensity

لو حسيت ان الصوت جاي من الخارج يبقى Diminished intensity

64 what are investigations of a chest case?

(1) Chest X-ray.

(2) Arterial blood gases if respiratory failure is suspected:

1. O₂ n: more than 85%: (increase in RF).
2. CO₂ n: 35 - 45 mmHg: (increase in COPD).
3. PH n: 7.35 - 7.45: (decrease in RF).

(3) Sputum culture & sensitivity for:

- TB (Acid fast Bacilli). - Bacterial infection.
- Malignant cells. - Yeasts.

(4) Skin test - for: - Bronchial asthma. - TB (tuberculin test). (5) Analysis of pleuritic fluid: in pleural effusion.

(6) Respiratory function test:

1. Vital capacity: Forcible expired air volume after deep inspiration:

- Normally: 3-5L.
- **Decrease:** In restrictive lung disease (e.g. fibrosis - collapse).

2. Forced expiratory volume 1: (FEV₁): % of air expired in 1st

Second by forced expiration.

- Normally: 75%.
- **Decrease:** In obstructive airway disease (e.g. C.O.P.D.).

(7) V/Q (Ventilation & perfusion) scanning: To detect suspected pulmonary embolism.

(8) Bronchoscope: To detect & guide biopsy for bronchogenic carcinoma.

(9) Bronchogram: may be used to diagnose bronchiectasis. 65.

65. What are manifestation of respiratory failure?

Type 2: decrease O₂. – **increase** CO₂

(General examination of a chest case):

- (1) Central cyanosis (due to Hypoxia).
- (2) CO₂ narcosis (due to CO₂ retention).
- (3) Tachypnea (> 40/min = decompensated resp. Failure).
- (4) Others:
 - (a) Clubbing of fingers in chronic respiratory failure. (due to chronic hypoxia).
 - (b) Working ala nasi (in pneumonia).
 - (c) Over action of accessory muscles of respiration.
 - (d) Flapping tremors.
 - (e) May be bilateral pitting edema LL due to:
 - 1. Hypoxia: VD.
 - 2. Renal correction of acidosis= H^+ retention of Na⁺ & H₂O.

66. What are causes of cor pulmonale?

(1) Acute:

- Tension pneumothorax.
- Massive pulmonary embolism.

(2) Subacute:

- Showers of small pulmonary emboli.

*Repeated showers of minute emboli cause occlusion of large number of pulmonary arterioles - thrombo-embolic P.H
- subacute cor pulmonale*

- Lymphangitis carcinomatosa.

(3) Chronic:

- Hypoxic: COPD (Hypoxia $\Rightarrow$ Pulm.V.C $\Rightarrow$ PH).
- Obliterative: Fibrosis of lung. e.g. Bilharzial corpulmonale.
- Restrictive: Severe skeletal deformity.

67. What are manifestations of corpulmonale?

(1) Manifestations of Primary chest disease.

❖ Cough Dyspnea, Hemoptysis, and Chest pain.

(2) Manifestations of pulm hypertension.

- ❖ Symp of Low CO.
- ❖ Symp of systemic congestion.
- ❖ Symp of the cause.
- ❖ Giant "a" wave in neck veins.

(3) Manifestations of R.V. enlargement.

- ❖ Apex : Diffuse ,shifted out mainly ,tapping
- ❖ Others: Epigastric pulsation, left parasternal pulsation, dullness over bare area + dullness over lower 1\3 of sternum.
- ❖ Rocking: Right or external rocking (retraction of apex with simultaneous Lt. Parasternal bulge due to clock wise rotation).

(4) Manifestations of R. V failure. (General examination in a chest case):

1. Congested neck veins.
2. Congested tender pulsating liver .
3. Jaundice.
4. Edema LL (Bilateral & pitting).
5. Ascites.

68. What is treatment of bronchial asthma?

Between attacks	During attack
(1) Avoid antigen. (2) Corticosteroid (inhaled & oral). (3) Mast cell stabilizers: - INTAL. - Ketotefen.	(1) O ₂ therapy. (2) Bronchodilators: - Aminophylline (IV). - Salbutamol (inhaler). (3) Mucolytic. (4) Antibiotics.

69. What are chest causes of jaundice?

(1) Corpulmonale (Rt. Sided HF)

❖ Systemic congestion produce :

1-Hemolytic jaundice: due to hemolysis of extravagated blood.

2- Obstructive jaundice: due to obstructive of biliary canaliculi by edematous Congested liver cell.

3-Hepatocellular jaundice: due to liver cirrhosis caused by hemosidrosis from Hemolysed RBCs.

(2) Pulmonary infarction.

❖ Hemolytic jaundice.

(3) Anti TB drugs. (Hepatotoxic)

(4) Bronchogenic carcinoma with liver metastasis.

(5) Suppurative lung syndrome with liver amyloidosis. (Chronic toxemia)

(6) Associated liver disease.

70. What are chest causes of edema LL?

(1) **Corpulmonale**

(2) **Hypoproteinemia due to:**

- Recurrent tapping of pleural effusion.
- Chronic expectoration.
- Renal & liver amyloidosis 2nd to supportive syndrome. (Chronic toxemia)
- Bronchogenic carcinoma with liver metastasis.

71. What are causes of suppurative lung syndrome?

(1) **Lung abscess.**

(2) **Bronchiectasis.**

(3) **Empyema with bronchopleural fistula.**

72. What is the importance of pulse examination in a chest case?

(1) **Rate:** Tachycardia caused by:

- Stimulants in ttt. Of br. asthma.
- Hypoxia.

(2) **Volume:** Big: VD due to hypoxia.

Small: ++ C.O. Due to corpulmonale.

(3) **Character:**

- **Pulsus paradoxus:**
 - C.O.P.D.

(Forced inspiration -
inspiring lung accommodates
blood > normally - LV filling.
* In this case, SBP&DBP drop
during inspiration giving the so
called "pseudo paradox"

- Severe asthma.

- Water hammer pulse: due to VD caused by hypoxia.

(4) Equality: Unequal pulse volume: Pancoast tumor.

(5) Rhythm: Irregular; e.g. Multifocal atrial tachycardia (MAT) in cases of C.O.P.D.

ABDOMEN

1. Surface anatomy of the liver.

-Upper border:

- Lt MCL: 5th space.
- Rt MCL: 5th rib.
- Rt MAL: 7th rib.
- Rt SL: 9th rib.
- Rt PVL : 9th rib.

-Lower border:

- Lt MCL: 5th space
- Lt PSL: 8th rib
- Rt MCL: 9th rib
- Rt MAL: 11th rib.
- Rt SL: 12th rib.
- Rt PVL: 12th rib

2. What are causes of generalized abdomen swelling?

- 4f

1-Fluid: Ascites

2-Fetus: pregnancy

3-Fat: obesity

4-Flalus: Gas distension

- organomegally or intraabdominal mass

3. What are signs of ascites?

- **Inspection:** Generalized abdominal distension with:

- Fullness in flanks.
- Umbilicus is shifted down.
- Umbilicus is bulging.

- **Palpation:** Transmitted thrill.

- **Percussion:** - Shifting dullness (4 ve if > 1500 mL)
- Knee Elbow.
- **Auscultation:** Buddle sign.
- **Sonar:** If clinically is not evident.
- **Fullness in Dogla's pouch by P.V. Exam.**

4. How to "differentiate" intraabdominal from extra abdominal swelling?

Ask patient to elevate his trunk unsupported:

- If **decreased** ~ Intraabdominal.
- If **increased** ~ Extra abdominal.

5. How to "differentiate" between lipoma, hernia & varicose vein on abdomen?

- **Lipoma:**
 - No expansile impulse on cough.
 - Slippery edge.
- **Hernia:**
 - expansile impulse on cough. -reducible.
- **Varicosities:**
 - expansile impulse on cough
 - thrill.

6. What is the cause of "wide" subcostal angle?

- **Normally:** it is about 90° (70 - 110°).
- **Wide S.C.A:** indicates chronic **increase** in I.A.P. due to upper abdominal Mass (e.g. hepatomegaly, splenomegaly or ascites or emphysema).

Chronic increased intrathoracic pressure e.g. :(COPD)

7. What are causes of divercation of recti?

Chronic increase in IAP e.g. Hepatomegaly, splenomegaly, tense ascites, **multiparous**. It may be congenital.

8. What are causes of downward displacement of umbilicus?

- Upper abdominal mass e.g. Hepatomegaly or splenomegaly.
- Ascites. (**Tanyol sign**)

9. What is normal site of umbilicus?

Midway between symphysis pubis and xiphisternal junction.

10. What are causes of bulging of umbilicus?

- Increased IAP by tense ascites. **Upper swelling**
- Umbilical & Para umbilical hernia.

11. What is "caput medusa"?

Dilated veins radiating away from the umbilicus & caused by reopening of umbilical vein by the high pressure of portal vein in case of PORTAL HYPERTENSION.

12. What makes an adult male has a "feminine" hair distribution (straight instead of triangular)?

- Liver cirrhosis due to lack of destruction of estrogen.

13. What are "complications" of scar?

- Keloid.
- Pigmentation. (**Addison**)
- Delayed healing. (**DM, infection, lack of good coaptation**)
- Sinus.
- Bleeding.
- Infection.
- Surgical emphysema.
- Incisional hernia.

14. What are causes of "stria Alba"?

1. Tense ascites.
2. Marked obesity.
3. Repeated pregnancy. (**Stria gravidarum**)
4. Severe dieting.
5. Healed stria rubra.
- 6- **Wasting disease.**

15. What is the cause of "stria rubra"?

Cushing syndrome

-Excess corticosteroid therapy.

16. What are medical causes of "pruritis"?

1. Obstructive Jaundice.
2. Diabetes.
3. Uremia.
4. Bilharziasis.
5. Drug hypersensitivity.

17. What is the cause of visible veins on abdomen?

-Tense ascites. (Abdominal distension).

18. If there is a D.V below-umbilicus how to differentiate its causes?

By Milking test: Rapid refilling:

-From above =Portal hyper tension.

-From below =inferior venacaval obstruction.

	Portal hypertension	IVC obstruction
1-site of vein:	- Prominent around umbilicus -Absent over the back.	-Prominent in flanks. -Present in back.
2-Direction of blood flow. (Below umbilicus).	-below umbilicus.	- Toward umbilicus.

19. Where are the hernia "orifices"??

1. Epigastric.
2. Umbilical.
3. Incision.
4. Inguinal
5. Scrotal.

Hernia: expansile impulse on cough. it occurs in weak abd wall increase intra-abdominal pressure.

20. What is the cause of "visible peristalsis"?

Intestinal obstruction.

*-in pyloric obstruction: slow wave in upper abdomen.
 -in occasional finding in thin individual:
 small intestinal obstruction: step ladder pattern around umbilicus.
 Stimulated by:
 -gentle tapping or massage _cold stimulation of skin.
 -drinking soda water.
 -Confirm by:
 -succussion splash (place stethoscope on abdomen: with the free hand quickly depress abd. Wall=splash is heard).*

21. What is the importance of examination of "male Genitalia" in abdominal case?

- 1) Testicular atrophy: Liver cirrhosis.
- 2) Scrotal edema: Liver failure Nephrotic.
- 3) Hydrocele: Ascites.
- 4) Varicocele: Intra-abdominal tumor.

5) Thick spermatic cord: Bilharziasis.

6) Sinus on back of scrotum: TB peritonitis.

22. What are "aims" of superficial palpation?

1) To detect: - Superficial man. - Tenderness.

- Guarding. - Rigidity.

- Thrill.

2) To prepare the patient for deep palpation.

(To gain the patient confidence).

Method: start in LT iliac fossa _turn anti clock wise to end in epigastrium.

23. What is the difference between "guarding & rigidity"?

* Guarding: - Is a localized contraction of anterior abd. Wall.

- Caused by: appendicitis, cholecystitis, liver congestion....

NB: Nervous people unable to relax.

-Rigidity: Is a diffuse contraction of ant. Abd. Wall.

- Caused by: Peritonitis.

(Absent of abdominal movement _Intestinal sound).

24. What are "normally palpable" structures in the abdomen?

- In thin lax abd. Wall:
- Lower hepatic edge.
- Abdominal aorta.
- Sigmoid colon
- Lower Rt renal pole.
- Rectus abdominus.
- Inguinal LNs.

25. What are different methods of palpation of liver and spleen?

1. Single handed.
2. Two handed.
3. Enforced (for thick or rigid abdomen).
4. Bimanual (for thick or rigid abdomen).
5. Hooking (for shrunken liver or impalpable spleen). **Pt (supine)**
6. Dipping: (in case of tense ascites). **Or Ballotmen**
7. **Tip of hand (Hutchinson).**

26. What are points to "comment" on for palpable liver or spleen?

1. Size in Cm or in fingerbreadth of patient.
 - normally not felt below costal margin.
 - Enlarged: in patient finger breadths (orcm) below costal margin.
 - Shrunken: liver cirrhosis_B.fibrosis.
2. Border (sharp - rounded).
 - normally felt as resistance.
 - Sharp: liver cirrhosis_B.fibrosis.
 - Rounded: congenital-_inflammatory_-infiltration.
3. Surface (smooth - irregular).
4. Consistency (soft- firm - hard).normally soft.
 - Soft_ enlarged: congenital-_inflammatory_-infiltration.
 - Firm:-Bilharziasis.
 - Hard:-malignancy.
 - Cystic:-amebic abscess|_-hydatid cyst.
5. Tenderness.in **congenital-_inflammatory_-infiltration.**
6. Pulsation.
7. Notch (for spleen).
8. Pettiness (for spleen).

27. What is liver "span"

Vertical distance in Cm in MCL between upper border or lower border of liver.
 Normally it = 8-10 Cm in female. 10-12 Cm in male. = (up to 15 Cm).

NB: Middle line: 4_8 cm.

28. What are causes of "tender" liver?

- Congested (e.g. Rt Sided HF).
- Inflamed (e.g. hepatitis).
- Malignancy infiltrating capsule.

29. What are causes of "multiple" splenic notches?

- Multiple splenic infarction.
- Congenital.

30. What are causes of "absent" notch?

- Adhesions.
- Malignancy.
- Congenital.
- Infarction.**

31. Mufti's signs?

- "Pittiness" of spleen due to "chronic myeloid leukemia".

32. Causes of "pulsating" liver?

- TR. - TS. - RVF.

Due to systemic congestion.

33. What is the "method" of renal palpation?

- Bimanual method:
- Rt hand: in hypochondria
- Lt hand: in renal angle.
- ASK patient to inspire deeply

-LT kidney: the LT hand placed anteriorly in the left lumbar region while the right hand is placed post, in the left loin, Ask Pt to take deep breath while approximating both hand left the kidney .normally not felt.

-Rt kidney: as left but with opposite hand,

-Normally lower pole of Rt kidney is palpable in thin pt.

34. What is meant by "huge spleen"? & what are its causes?

- Splenomegaly crossing midline?
- Causes: (1) Congestive: splenomegaly due to portal hypertension caused by periportal bilharzial fibrosis.
- (2) Thalassemia major.
- (3) Chronic myeloid leukemia.
- (4) Chronic malaria.
- (5) Myeloproliferative disorders:
 - Polycythemia vera.
 - Myelosclerosis.
- (6) Kala Azar (leishmaniasis).
- (7) Lipoid storage disease
- (8) Splenic sarcoma.

35. How can you differentiate splenomegaly from a renal mass?

Renal mass	Splenomegaly
• Ballotable.	• Not Ballotable.
• Descend with late insp	• Descend with early insp
• Band of Resonance across its dullness	• Continuous dullness
• You can bring its upper pole.	• You cannot.
• No notch	• Notching
• No notch.	• Notch

•Round lower pole.	•Sharp anterior border.
•Does not cross midline (except horse shoe kidney.	•Can cross midline.
•May be bilateral.	•Never bilateral.
•You can bring your hand above it,	You can not

36. What are causes of ascites?

- Transudate:

-increase hydrostatic pressure. SAAG→1.1

(1) Rt sided HF (**systemic congestion**). :

Due to increase hydrostatic pressure. SAAG>1.1

(2) Meig's disease (**Miscellaneous**)

(3) Nephrotic (**hypoalbuminemia**).diminished osmotic pressure.

(4) Myxedema (**Miscellaneous**)

(5) Liver failure.

- Exudate: **due to increase permeability of peritoneal capillary. SAAG <1.1.**

(1) Pancreatitis

(2) TB peritonitis

(3) Malignant.

(4) Rupture viscus (blood).

(5) Budd Chiari syndrome.

37. Percussion of abdomen is light or heavy percussion?

- Light, except upper border of liver

38. What is the importance of detection of upper border of liver before palpating its lower border?

- To differentiate ptosed from enlarged liver.

- To estimate liver span.

39. What is the method of detecting "earliest" splenomegally?

- Percuss AAL in space 8, 9 & 10 twice once before & once after deep-inspiration.
- If resonant before & after inspiration, so no insp splenomegaly, but if resonant before & dull this is the earliest sign of splenomegaly.

40. Why the spleen enlarge towards Rt iliac region?

Because it's guided by "phrenicocolic ligament".

41. What causes of "vertical enlargement" of spleen?

- Malignancy.
- Rupture phrenicocolic lig.

42. Why we "flex" patient's ll during deep palpation of abdomen?

- To relax superficial fascia (no deep fascia in the abdomen).

43. Auscultation of abdomen?

1. Intestinal sounds: (heard on abdominal wall)

- (5-10) sec. Intervals:

- 1) Intestinal obstruction (LO.).
- 2) Diarrhea.
- 3) Thyrotoxicosis.
- 1) Excessive handling (e.g. intraoperative).
- 2) Long standing LO.
- 3) Myxedema.
- 4) Verapamil.

2. Venous hum: Portal hypertension.

3. Bruits - Epigastric: Sup. Mesenteric A.

- Umbilical: Aortic dissection.
- Subcostal (2.5 Cm above & lat. to umbilicus):
- Renal a. Stenosis.
- Iliac: Common iliac a. Stenosis.
- Femoral: Femoral a. Stenosis.

4. Peritoneal rub: Malignancy or infarction in liver or spleen.

5. **Scratch test** → to detect liver edge.
6. **Succussion splash** → pyloric obstruction.
7. **Puddle sign** → Minimal ascites.

44. What are manifestations of liver cell failure?

(General examination of abdomen- case)

1. **Hepatic encephalopathy {terminal):**
Due to increased ammonia.
2. **Jaundice.**
-Lemon yellow (hemolytic)
-Olive green (obstruction)
- Orange yellow (hepato cellular).
Failure of liver cell to metabolize bilirubin
3. **Bleeding tendency: decreased prothrombin and thrombocytopenia due to hypersplenism.**
4. **Foetor hepaticus**
(Lack of demethylation of methyl mercaptan). **(Detoxification)**
5. **Red glazed tongue (vit B12 deficiency).**
6. **Spider navi:**
Dilated central arteriole with radiating capillaries.
- Character: spider in shape_pulsating_variable in size.
-site: area drained by SVC (face_neck_UL_chest_
-DD: hereditary telangiectasia|senile angioma.
7. **Gynecomastia (increased estrogen).**
8. **Flapping tremors.**
9. **Palmar erythema:**
Bright red-well demarcated-mottled-homogenous. Presented in thinner-hypo thinner-with central pallor.
Causes :(ACTH treatment-pregnancy-RA-thyrototoxicosis-reticulocytosis-normal variant)
10. **Clubbing (in primary biliary cirrhosis).**
Def: proliferation of CT nail bed in response to:
-chronic toxemia: pale-a cyanotic.
-chronic hypoxia: blue-cyanotic.
Degree: first degree: obliteration of nail bed.
-Second degree: parrot peak.

- Third degree: drum stick.
- osteoarthritis.

Causes: pulmonary AV shunt-portal pulmonary shunt-basal lung collapse due to tense ascites.

11. Ascites (due to hypoalbuminemia + portal hypertension).
12. Female hair distribution (increased estrogen).
13. Bilateral pitting edema LL (hypoalbuminemia).

45. Investigations of a liver case?

1. Liver Enzymes:

1. Transaminases:

A. Serum Glutamic Pyruvate Transaminase (SGPT) = Alanine transaminase (ALT): This increase in acute liver disease (specific for liver).

B. Serum Glutamic Oxaloacetate transaminase (SGOT) =

Aspartate transaminase (AST): This increase in chronic liver disease (present in heart as well).

2. Gamma Glutamyl Transferase (GGT): Specific for liver disease.

3. 5 nucleotidase: Increase in obstructive jaundice.

4. Alkaline phosphatase: - Increase in liver disease.

- Increase in bone disease.

2. Bilirubin:

- Total (N: 0.8 - 1.2 mg %).
- Indirect.
- Direct (N: 0.1 mg %).

3. Plasma proteins:

- a. Albumin (N: 3.5 - 5 mg %): ↓, in chronic liver disease:
- b. Globulin (N: 2 - 3 mg %).

c. A/g ratio:

- Decreased in acute liver disease due to increased globulin.
- Reversed in chronic liver disease due to j,j, Albumin.

. d. Alpha fetoprotein: increased in hepatoma.

e. Prothrombin:

- Concentration: N = 100% (in chronic liver disease).
- Time: N = 12.5 sec. (increased in chronic liver disease).

4. Complete blood count:

- Pancytopenia (1 RBCs + 1 Platelets) due to:
 - Hypersplenism. - Bleeding.

5. Urine & stools: Bilharzial ova.

6. Hepatitis markers : B & C.

7. Abdominal Sonar: to detect:

- Ascites.
- Liver abnormality.
- Spleen abnormality.
- Renal abnormality.

8. Liver biopsy.

9. Analysis of ascetic fluid: If a case of ascites.

10. C.T abdomen (to detect hepatoma).

11. Endoscopy:

- Upper GIT endoscopy: to detect.
 - 1. Esophageal varices. 2. Peptic ulcer
- Lower GIT endoscopy:
 - 1. Piles. . 2. Bilharzial Ulcers & polypi.

46. Causes (types) of liver cirrhosis:

- (1) Post-hepatic (B & C) **post viral hepatitis (Autoimmune).**
- (2) Alcoholic (nutritional). (**Prolonged consumption toxic for liver cell**)
- (3) Hemochromatosis. (**Massive generalized iron deposition in organ lead to destruction of liver cell**).
- (4) Wilson's disease (copper PPT). **function impairment of organ.**
- (5) Rt. Sided HF= cardiac cirrhosis. **-due to:**
 - 1- Long standing hepatic venous congestion.
 - 2 -prolonged RVF-TS-TR
 - 3-prolonged pericardial effusion.
- (6) Biliary cirrhosis.
 - due to: long standing biliary obstruction (cholestasis).**

47. Liver cirrhosis: definition?

-Degeneration - Regeneration - Loss of architecture & Fibrosis.

Irreversible loss of normal structure

Causes or types:

Alcoholic cirrhosis

Biliary cirrhosis

Idiopathic cirrhosis

Cardiac cirrhosis

Drug induced (alpha methyl dopa.

Amidarone. INH. Methotrexate

48. Causes of portal hypertension

(1) Presinusoidal:

- Portal vein thrombosis.
- Portal vein stenosis.
- Periportal fibrosis (Bilharziasis).

(2) Sinusoidal:

- Liver cirrhosis.
- Alcoholic hepatitis.

(3) Post sinusoidal:

- Venooclusive disease.

- Budd Chiari syndrome
 - Inferior vena caval obstruction.
- Constrictive pericarditi

تقسيمه ثانيه

*Suprahepatic causes:

-RVF- Pericardial effusion -high IVC obstruction, budd chiari syndrome.

*Intrahepatic causes:

- Liver cirrhosis - Veno occlusive disease -Bilharizal periportal fibrosis

*Infra hepatic causes:

Portal vein obstruction e.g thrombosis & malignancy

49. Definition of hypersplenism?

- Phagocytic activity of spleen.

Exaggeration of normal splenic function leading to destruction of one or more of blood cells (mono -bi - pancytopenia)

50. Treatment of ascites?

(1) Bed rest (to unload liver)

(2) .Diet: **increase protein.(N.B. not in hepatic encephalopathy)**

Decrease salt.

(3) Salt free albumin & diuretics.

(4). Tapping. **4 – 5 liters at one time combined with IV albumin**

51. Causes of splenomegally?

(A) Infective:

(a) Parasitic (I) Shistosomiasis (Egyptian congestive splenomegaly).

(2) Kala azar.

(b) Chronic: - Malaria.

- Tuberculosis.

(c) Acute: - Infective endocarditis - Infectious mononucleosis.

- Septicemia.

(B) Inflammatory: - Systemic lupus erythromatosis.

- Rheumatoid arthritis.

(C) Malignant: - Lymphomas cyst

(D) Hematological:

- Leukemia.

-MPDS (1^{ry} polycythemia – myelofibrosis)

-Anemias:

- hemolytic (except sickle cell)
- Megaloblastic
- Iron deficiency

(E) Metabolic: - Amyloidosis - Sarcoidosis

(F) Vascular causes: congestive splenomegaly

1. Portal hypertension

2. Splenic vein thrombosis

52. Causes of hepatomegally?

(1) early cirrhosis (later on it shrunk).

(2) Inflammatory causes:

1. Hepatitis. 2. Schistosomiasis. 3. Abscesses (pyogenic, amoebic)
4. Sarcoidosis.

(3) Neoplastic causes:

1. 1^{ry} carcinoma. 2. Liver metastasis.

(4) Hematological causes:

1. Leukemia. 2. Lymphomas. 3. Thalassemia.

(7) Biliary obstruction. **Extra hepatic** **Intrahepatic**

(8) **Cysts: hydatid** **Polycystic**

53. Grades of b hepatosplenomegally?

- Grad I: Hepatomegaly.**
- Grade II: Hepatosplenomegally.**
- Grade III: Splenomegaly + shrunken liver.**
- Grade IV: As III + ascites.**

54. Causes of hematemesis (melena)

1. Rupture esophageal varices.

- **GORD.**
- **Cancer esophagus**
- **Mallory Weiss syndrome.**
- **Tear of the esophagus**
- **Gastric junction due to severe vomiting**
- **Rupture of aortic aneurysm into the esophagus**

2. Peptic ulcer.

- **Angiodysplasia of the stomach.**
- **Bleeding from gastric varices**

3. Gastritis. **Due to drug or severe stress**

4. Gastric carcinoma.

5. Upper small intestine causes: Angiodysplasia. Adenoma ...adenocarcinoma.... ulcers

6. Bleeding tendency.

7. False hematemesis: vomiting of ingested blood coming from: bleeding nose, mouth, pharynx

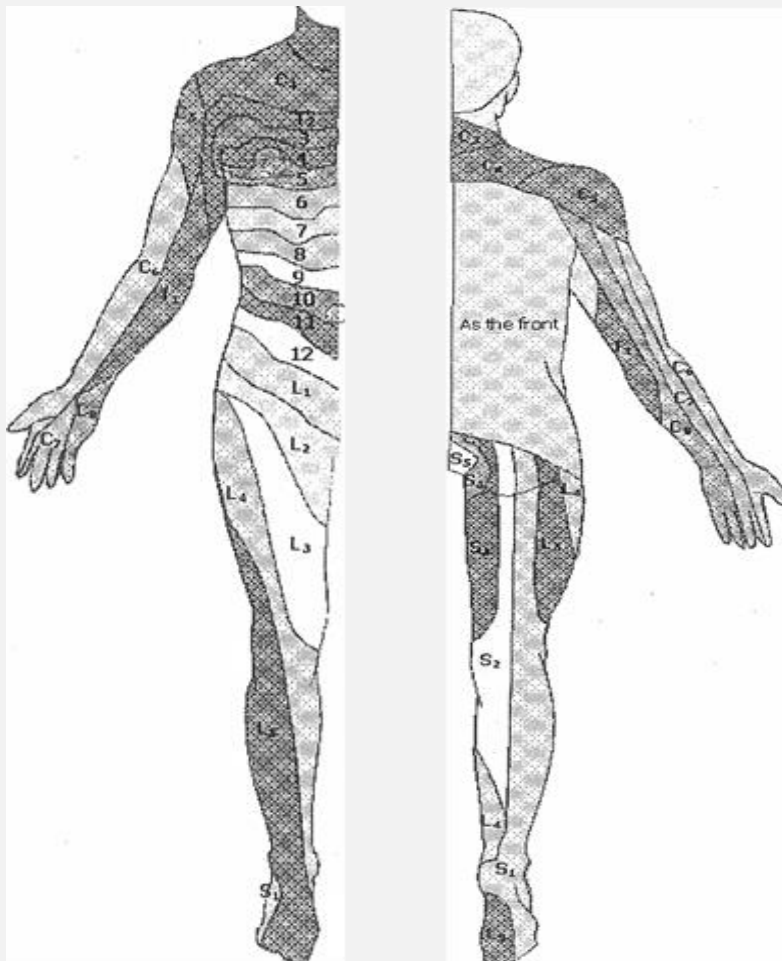
NEUROLOGY

1. What is "pyramidal tract" pathway?

Cortex (area 4 in prefrontal gyms) - Corona radiata - Genu of internal capsule - Brain stem - some fibers cross midline to supply motor Cr. Nuclei (Corticobulbar tract) & others continue to cross midline at lower end of medulla to supply contralateral anterior horn cells of spinal nerves (Corticospinal tract).

2. What is the dermatomal supply?

DERMATOMAL DISTRIBUTION



3. What are criteria of lower motor neuron lesion?

1. Paralysis. **Complete**
 At the same level of lesion
 Ipsilateral (at the same side of the lesion)
2. Hypotonia.
3. Hyporeflexia.
4. Wasting. **Early ... severe**
5. Fasciculation (if AHCs or motor Cr. Nuclei irritation).
6. **Trophic changes of skin: thin, dry, hairless, prattle nails.**

4. What are criteria of upper motor neuron lesion?

1. PARALYSIS.

Incomplete (usually paresis)

Site: below level of the lesion

*Contra lateral if lesion occur above
crossing of pyramidal tract*

*Ipsilateral if lesion occurs below crossing
of pyramidal tract*

*Distribution: affect weak muscle: distal >
proximal, UL > LL, progravity > antigravity*

Affect speech: slurred speech

2. **HYPERTONIA.**

*Deep: 1. Exaggeration of normal reflexes
2. Appearance of pathological reflexes
3. Clonus*

*Superficial: 1. Babinski sign
2. Loss of abdominal reflexes*

3. **Hyperreflexia.**

*1. Affect antigravity muscle > progravity: flexor of UL, EXTENSOR OF LL & trunk, adductor
2. Clasp knife spasticity
3. Affect posture (flexion of UL & extensor of LL)
4. Affect gait (spastic gait) - circumduction gait (in hemiplegia)
5- Scissoring gait (in paraplegia)*

4. **NO OR MILD WASTING.**

5. **NO TROPHIC CHANGES.**

5. What is nerve supply of tongue?

- Motor: Hypoglossal nerve (XII).
- Sensory: 1. Anterior 2/3:
 - Taste: Facial nerve (VII).
 - General sensation: Trigeminal nerve (V).
- 2. Posterior 1/3:
 - Taste: Glossopharyngeal nerve (IX).
 - General sensation: Glossopharyngeal nerve (IX).

6. * what are sure signs of bilateral pyramidal tract lesion?

1. Appearance of jaw reflex. **(Normally inhibited)**
2. Precipitancy.

7* what is meant by gower's test - gower's sign & gower's disease?

1. Gower's test: Test for shoulder girdle TONE.
2. Gower's sign: Climbing sign for pelvic girdle myopathy.
3. Gower's disease: Distal type of myopathy.

8.* what is grading of muscle power?

- (0): Complete paralysis.
- (1): Contraction but no movement.
- (2): Movement with gravity.
- (3): Movement against gravity.
- (4): Movement against gravity & some resistance.
- (5): Full strength **(normal)**

9. *what is grading of deep reflex?

Grade		Description
(0)	-	Absent = A reflexia.
	+	Present only with re-enforcement.
(1)	+	Just present = Sluggish.
(2)	++	Normal = Brisk.
(3)	+++	Exaggerated= Very brisk= Hyperreactive.
(4)	++++	Clonus.

10. * what is inverted supinator reflex?

Components:

1. Lost biceps reflex (C5_6). **LMNL (hyporeflexia) (C5)**
2. Exaggerated triceps reflex (C6_7). **UMNL (loss of tone inhibition) (C6)**
3. Abnormal brachioradialis reflex (flexion of fingers).

Normal component of brachioradialis at C5 disappear (LMNL)

Abnormal component at C6 appear (UMNL)

Lesion: At C5.

11. * what are causes of babinski sign?

Babinski sign: (extensor response)

-Definition: Dorsiflexion of big toe ($\pm$ fanning of other toes)

- Cause:

1. ($\pm$ Extra A) tract lesion.
2. Deep sleep, deep coma, or deep anesthesia.
3. Infants < 1 years.

12. * what are causes of equivocal plantar reflex?

- Absent (equivocal) response: Destruction in:

- Receptor: - Thick skin. - Cold skin.

- Centre: Lesion in S1.

-Afferent: Peripheral neuropathy.

- Pyramidal: Shock stage of UMNL

- Efferent: LMNL.

- Musculoskeletal: foot deformity.

13. * What are causes of hyperreflexia?

1. UMNL.
2. Thyrotoxicosis.
3. Tetany.
4. Hysterical.
5. Drug addiction.

14. * what are causes of hyporeflexia?

1. LMNL.
2. Posterior root affection.
3. Cerebellar ataxia.
4. Chorea.
5. Myxedema (delayed reflex).
6. Hypothermia.

15. * what are causes of lost ankle, preserved knee reflex?

1. Friedreich's ataxia.
2. SCD.
3. Peripheral neuropathy.
4. Epiconus lesion.
5. Cauda equina lesion of S 1.
6. Holmes - Adies myotonic pupil.

16. * what are causes of lost ankle, exaggerated knee reflex?

1. Friedreich's ataxia.
2. Pellagra.
3. SCD.

17. * What are sure signs of pyramidal tract lesion?

Sure sign of pyramidal tract lesion:

1. Babinski sign.
2. Clonus.
3. If bilateral: - +ve jaw reflex (pathological reflex).
- Precipitancy.

18. * what are causes of "hypotonia"?

1. Lower motor neuron lesion (LMNL).
2. Shock stage of upper motor neuron lesion.
3. Cerebellar ataxia.
4. Rheumatic chorea.
5. Peripheral neuropathy.
6. Posterior column lesion.
7. Hysterical.

19. *what is the difference between "rigidity & spasticity"?

	Spasticity	Rigidity
Site of lesion	<i>b.</i> tract lesion	Extra <i>b.</i> Tract lesion.
Pattern	Clasp knife	Lead pipe Cog wheel
Distribution	1. Distal > proximal. 2. Antigravity muscles. a. Flexors of UL. b. Extensors of LL & trunk. c. Adductors.	1. Proximal > distal. 2. Flexors.
Deep reflexes	Hyperreflexia	Hyporeflexia

20. * what is the root value of the following reflexes?

Reflex	Root
1. Biceps.	C 5-6
2. Triceps	C 6-7
3. Brachioradialis	C 5-6
4. Knee	L 2_3_4.
5. Ankle	S 1-2
6. Adductor	L 4
7. Patellar	L 2_3_4.
8. Jaw	Trigeminal. (Aff &eff)
9. Glabellar	Facial.(aff &eff)
10. Corneal & Conjunctival	Cr aff 5- eff 7
11. Pharyngeal	Cr aff 9_ eff 10
12. Palatal.	Cr aff 5- eff 10
13. Plantar.	S1

تم بحمد الله